DOCUMENT RESUME

ED 424 123 SO 026 737

AUTHOR	Rabin, Steven
TITLE	Inside the Global Economy: Preview Guide to the Telecourse.
INSTITUTION	Annenberg/CPB Project, Washington, DC.
PUB DATE	1995-00-00
NOTE	76p.
AVAILABLE FROM	Annenberg/CPB Multimedia Collection, P.O. Box 2345, South Burlington, VT 05407-2345; Tel: 1-800-LEARNER (Toll-Free).
PUB TYPE	Guides - Classroom - Teacher (052) -- Non-Print Media (100)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Economic Change; *Economic Climate; Economic Development; *Economic Factors; *Economics; *Economics Education; Global Education; International Relations; Macroeconomics; Secondary Education; Social Studies

ABSTRACT

This document contains samples only of just the print components of a telecourse that includes: 13 videotapes, 2 videodiscs, a recommended textbook, a case-study reader and review guide, a text study guide, a faculty manual with text bank; and a computer softrware tutorial. This telecourse examines international global economies by means of 13 one-hour television programs, supported by the printed documentary material and computerized tutorial for use by faculty as student viewers. The preview guide offers a synopsis of each program and a general description of the print and computerized components of each program. The series includes: (1) "Trade - An Introduction"; (2) "Protectionism"; (3) "Trade Policy"; (4) "Trade Liberalization and Regional Trade Blocs"; (5) "Labor and Capital Mobility"; (6) "Multinational Corporations"; (7) "Fixed Versus Floating Exchange Rates"; (8) "Managing Currencies and Policy Coordination"; (9) "Exchange Rates, Capital Flight, and Hyperinflation"; (10) "Developing Countries"; (11) "Economies in Transition"; (12) "The Environment"; and (13) "The Evolving World Economy." The television/video series contains interviews with a range of individuals in the private and public sector around the globe who offer unique insights from the viewpoints of both those who make economic policy and those affected by it. (EH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

INSIDE THE GLOBAL ECONOMY

ED 424 123

INSIDE THE GLOBAL ECONOMY

PREVIEW GUIDE to the Telecourse

SO 026 737

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Christine Wilson Jackson

2A TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CONTENTS

Introduction 1

Course Organization and Its Components 2

Course Developers, Course Funders, and Personnel 3

Television Program and Video Case Study Descriptions 4

Sample Text Chapter 7

Sample Case Study Reader/Review Guide Chapter Excerpts 45

Sample Faculty Manual Chapter 57

Arrangements for Use . . . . . Inside Back Cover

For Further Information . . . . . Inside Back Cover

© 1994, Educational Film Center and the Corporation for Public Broadcasting

Excerpts from *International Economics, 5th Ed.*, © 1994, South-Western Publishing Company.
Reprinted with permission.

Excerpt from *Inside the Global Economy: Case Study Reader and Review Guide*, ©1994.
Reprinted with permission of the Educational Film Center, the Corporation for Public Broadcasting,
and South-Western Publishing Company.

Excerpt from *International Economics: Text Study Guide*, © 1994, South-Western Publishing Company.
Reprinted with permission.

Excerpts from Inside the Global Economy: Faculty Telecourse Manual, © 1994.
Reprinted with permission of the Educational Film Center,
the Corporation for Public Broadcasting, and South-Western Publishing Company.

INTRODUCTION

INSIDE THE GLOBAL ECONOMY is a unique international co-production that examines the core concepts and prominent forces of international economics, and the relationships of nations and their economic policies. The project—developed by the Educational Film Center and an international production team—consists of 13 one-hour television programs with documentary case studies plus accompanying print and computerized material for faculty and students.

The television/video series provides in-depth examination of the basic principles of international economics. Each of the programs contains interviews with a range of individuals in the private and public sector from around the globe. They offer unique insights from the viewpoints of those who make economic policy and those affected by it. Commentaries by distinguished international economists from five countries expand on key economic issues, providing an additional international focus.

The print components of INSIDE THE GLOBAL ECONOMY include: a recommended textbook, a case-study reader/review guide, a text study guide, and a faculty manual with test bank. These television and print materials serve as a complete undergraduate telecourse for distant learners. All of the components (including a computer software tutorial) are also available separately, providing a completely flexible set of resources to support the teaching of international economics and a variety of related courses.

As the world's economy is undergoing rapid change, there is great need for the coverage and analysis offered by INSIDE THE GLOBAL ECONOMY. As a telecourse, it is designed to serve post-Principles course students in economics as well as non-majors at both two- and four-year colleges and universities. It can also be offered as a non-credit or general adult education course to serve an even wider range of informal learners.

INSIDE THE GLOBAL ECONOMY enables students and general viewers alike to broaden their perspectives on economic issues, enhance their knowledge, and expand their insight into the increasing economic interdependence of nations. It provides:

- A viable learning alternative for students who are unable to attend on-campus classes
- An effective teaching option for colleges facing a scarcity of qualified economics teachers
- An opportunity both for independent study and to attract many more students to this next level of economics

While its multinational perspective is a hallmark of this new series, INSIDE THE GLOBAL ECONOMY is founded on the universal principles of international economics. The series, print, and software have been carefully developed as a unified course by an outstanding team of international economists and educators, led by highly regarded economist Dr. Nariman Behravesh, the project's director of content.

COURSE COMPONENTS AND ORGANIZATION

The new 13-program telecourse, INSIDE THE GLOBAL ECONOMY, represents a breakthrough in multinational content development and production cooperation, opening the door to understanding international economic issues and relationships among countries, peoples, and policies. This is the first series for the college audience that fully integrates the perspectives of leading economists and policy experts from around the globe in a cohesive and substantive television and print introduction to international economics.

Funded by the Annenberg/CPB Project, INSIDE THE GLOBAL ECONOMY was created and produced by the Educational Film Center in association with ABC-TV Open Learning Australia, Swedish Educational Broadcasting Company, The Teleac Foundation of The Netherlands, and JL Producciones in Chile.

Television/Video Programs

With its unique commitment to international views, INSIDE THE GLOBAL ECONOMY presents a rare glimpse into the ways nations respond to each other and how those responses affect people's daily lives. The television series was produced on location in more than 20 countries.

Each of the 13 programs includes three distinct elements. (1) presentation and analysis of the topic of the unit and the specific economic principles involved; (2) two documentary case studies—investigative stories with prominent leaders and citizens impacted by changes in policy—that reveal concrete applications of principles in the real world of business, labor, industry, and government; (3) a highly focused discussion of a major issue by prominent economists from around the world.

In collaboration with the Educational Film Center, its four international partners were responsible for producing case studies in their respective regions. A continuous system of content and production evaluation, including economist/producer team reviews, assured balanced and internationally accepted perspectives in this multinational effort during the course of its development. As a result, the television programs expand viewers' outlooks on diverse global economic issues.

The Textbook

The recommended textbook for INSIDE THE GLOBAL ECONOMY is *International Economics, 5th Edition*, by Robert J. Carbaugh (Professor of Economics, Central Washington University), published by South-Western Publishing Company in August, 1994. This 18-chapter text covers all the essentials of international economic principles, downplaying mathematics wherever possible in favor of highly readable prose and illuminating graphical representation. This approach is equally suitable for standard international economics courses and for use by non-economics majors who need to understand fundamental international economic principles. (For sale to students.)

Study Guide for Carbaugh's *INTERNATIONAL ECONOMICS*, 5th Edition

The Study Guide for Carbaugh's International Economics, Fifth Edition, is written by James S. Hanson, professor of economics at Willamette University. This helpful student manual contains problems and projects keyed, chapter-by-chapter, to the text. It is designed to help students check their own comprehension of material covered in the text and provides convenient review, especially when preparing for examinations.

The Case Study Reader/Television Review Guide

The newly created *Inside the Global Economy: Case Study Reader and Review Guide*, edited by Robert J. Carbaugh, is specially designed to provide critical readings and the study-guide component for the telecourse. Chapter-by-chapter, it correlates with the 13 television/video programs, corresponding directly with the documentary case studies they contain. Each chapter includes a basic content overview and key learning objectives, abstracts and full articles expanding on the principles illustrated in the video case studies, and student review questions/exercises. In addition to its use in telecourses, the Reader can serve as a valuable complement to standard international economics courses and a variety of related area studies. (For sale to students.)

The Computer Software Tutorial

Inside the Global Economy: An Interactive Tutor is a computer software tutorial, specifically developed for INSIDE THE GLOBAL ECONOMY by William T. Gunther (University of Alabama) and Irene R. Gunther (Systematic Research, Inc.). In addition to interactive review exercises and problems for self-testing, the software features simulations that students can use in forecasting scenarios (on variables such as fluctuating oil prices) or policy analysis (e.g., the effects of changing interest rates). The software is designed for the IBM PC and compatibles using DOS and Windows. (For sale to students.)

The Faculty Manual

A principal telecourse management resource for international economics instructors, this Faculty Manual for INSIDE THE GLOBAL ECONOMY and Carbaugh's *International Economics, Fifth Edition*, provides a strong link between the television programs, textbook, and Reader. It contains a complete course outline; individual lesson overviews with learning objectives; summary overviews of the televisions programs and video case studies with identification of the principal interviewees; related textbook chapter and case-study reading assignments; student computer software exercises; and a test bank of questions and answers for each lesson, covering both television and print components. The Manual also includes suggestions on planning, organizing, and promoting a one-semester international economics telecourse; explains the faculty role in the telecourse; and contains additional information on the telecourse developers. (Complimentary to telecourse licensees.)

COURSE DEVELOPERS

The Educational Film Center (EFC)—an award-winning television, video, and film production company—has created telecourses, documentary and dramatic productions for worldwide broadcast, cable, schools, libraries, and the home-video market. EFC's informational and formal educational productions cover a wide range of topics in the sciences, social sciences, the humanities, and health. Programs for national broadcast include the two-hour PBS documentary AMERICA'S EMBATTLED ECONOMY and the 28-part telecourse series, ECONOMICS U$A. EFC's many program awards include a national Emmy and 15 regional Emmies as well as numerous awards and medals from a wide range of international film and educational video organizations and festivals.

ABC-TV Open Learning Australia is a division of ABC-TV dedicated to providing higher education to Australians through broadcast and satellite distribution of a full range of telecourses. Working directly with a number of major universities, Open Learning produces many of its own telecourses for distant-learning students and general audiences.

Swedish Educational Broadcasting Company (Utbildningsradion) produces and broadcasts TV and radio programs for the entire educational community in Sweden, from preschool through university levels as well as for distance education and informal adult education. The organization also produces print and support materials for many of its programs and courses.

The Teleac Foundation is the producer and national broadcaster of educational radio and TV programs in The Netherlands designed for special educational target groups and general audiences. Teleac is also the publisher of printed education material for more than 350 courses and series produced over a period of 28 years.

JL Producciones de CINE y TV of Santiago, Chile, is an independent television and documentary production company.

COURSE FUNDERS

The Annenberg/CPB Project is the major funder for the INSIDE THE GLOBAL ECONOMY telecourse. The Annenberg/CPB Project, founded in the U.S. in 1981, was created to enhance the quality and availability of higher education through the use of telecommunication and information technologies. During the past 13 years, the Project has funded creation of more than 38 television courses in a wide variety of subject areas, including ECONOMICS U$A.

KEY PROJECT PERSONNEL

Dr. Nariman Behravesh
Director of Academic Telecourse Content
Senior Vice-President & Research Director
DRI/McGraw-Hill

Ira H. Klugerman
Executive Producer
Vice President, Educational Film Center

Stephen L. Rabin
Project Director
President, Educational Film Center

Louis Barbash
Producer-Writer
Educational Film Center

Peter Baroutis
Executive Producer
ABC Australian Television Network

Lupko Gerard Ellen
Educational Content Coordinator
Teleac, The Netherlands

Francisco Ginesta
International television reporter/producer
Chile

Roger Samsioe
Producer-Director
Swedish Educational Broadcasting Company

THE INTERNATIONAL ECONOMICS CONTENT TEAM

Thomas O. Bayard
Deputy Director & Research Fellow
Institute for International Economics

Magnus Blomstrom
Professor of Economics
Stockholm School of Economics
and Research Associate, U.S. National Bureau of Economic Research

Jolanda E. Heemskerk
Lecturer in International Economics and Finance
University of Amsterdam

Lawrence R. Klein
1980 Nobel Laureate and
Benjamin Franklin Professor of Economics & Finance
University of Pennsylvania

Rachel McCullough
Professor of Economics
Brandeis University

Richard H. Snape
Economics Department Chair
Monash University, Australia

Gerver Torres
Alternate Executive Director,
International Monetary Fund and
President, Venezuelan Investment Fund

Frederick van der Ploeg
Professor of Political Economy
University of Amsterdam, The Netherlands

THE TELEVISION VIDEO LESSONS

The following overviews describe the content of the 13 programs and 26 case studies for INSIDE THE GLOBAL ECONOMY.

PROGRAM 1: Trade—An Introduction

Learning Objectives:

- Comparative advantage and economies of scale are two principal reasons why countries trade.
- Comparative advantage depends on a variety of factors, including the quality of the work force, the amount of capital per worker, and technology.
- Nations as a whole benefit from trade; inevitably, however, there are some companies and workers that are hurt by trade.

The series opens against a backdrop of the forces that are transforming the global economy, focusing on questions such as: Why do nations trade? What determines the basis and direction of trade? Who gains or loses from trade?

Case Study: IBM's shift of computer production from the U.S. to Japan. *With Ross Garnaut, Australian National University, and Hajime Watabe, Director, Personal Systems Products, IBM Japan.*

Case Study: The impact of the 1970's Australian mineral exports boom on its domestic car production. *With Bob Gregory, Australian National University; Sir Brian Inglis, former Managing Director, Ford Australia; John Button, former Australian Industry Minister; Sir Arvy Parbo, former board member, Australian mining company.*

PROGRAM 2: Protectionism

Learning Objectives

- Countries protect their industries for a variety of reasons, most of which cannot be justified on economic grounds.
- While protectionist policies help targeted industries, the economy as a whole usually loses.
- As average tariff levels have been negotiated down in the post-WWII era, use of non-tariff barriers has gained in popularity.

An examination of the impediments to trade, covering both tariff and non-tariff barriers. Included are discussions of the driving forces behind protectionism and the likely winners and losers.

Case Study: French agricultural subsidies and the conflict in the Uruguay Round. *With Xavier Beulin, Vice Chairman, Chambre de l'Agriculture, Orleans; Stuart Eizenstat, U.S. Representative to the European Community; Steve Yoder, President, American Soybean Association; Frans Andriessen, former EC Commissioner.*

Case Study: Voluntary export restraints on Japanese cars into the U.S. *With Steven Beckman, Economist, United Auto Workers; William Brock, former U.S. Trade Representative; Mark Silbergeld, Director, Washington office, Consumer's Union; Robert Crandall, Economist, The Brookings Institution; Rep. John Dingell, Chairman, U.S. House Energy & Commerce Committee.*

PROGRAM 3: Trade Policy

Learning Objectives

- Developing countries carry out trade and industrial policies to promote industrialization; developed countries use them to counter market imperfections and help domestic industries seize profits from foreign competitors.
- Inwardly directed trade and industrial policy aimed at import substitution has had a poor track record in both developed and developing countries.
- Countries that have integrated into the world economy and engaged in export promotion policies have been more successful than those pursuing import substitution strategies.

A discussion of ways countries try to change their comparative advantage in trade through subsidies and industrial and regulatory policies. Import-competing and export-promotion policies are compared using specific examples from around the globe.

Case Study: The development of Airbus as an example of industrial policy. *With Michel Dechelotte, Director, International Relations, Airbus Industries; Stuart Eizenstat, U.S. Representative to the European Community; Frans Andriessen, former European Community Commissioner.*

Case Study: The Chilean wine industry and export promotion policy. *With Eduardo Gilasasti, President, Vina Conche y Toro; Alfredo Vidaurre, Past President, Vina San Pedro; Jorge Eyzaguirre, Co-owner, Vina Los Yascos.*

PROGRAM 4: Trade Liberalization and Regional Trade Blocs

Learning Objectives

- For the past 40 years (under the GATT auspices) trade liberalization has been carried out on a multilateral, reciprocal, and nondiscriminatory basis.
- Regional preferential trading arrangements (free trade areas, common markets, trading blocs, etc.) are another popular form of trade liberalization.
- Formation of a trading bloc can help or hurt world trade depending on whether it creates or diverts more trade.

Comparison of the progress made in multilateral trade liberalization in the post WWII era with parallel attempts to form various preferential trading arrangements; including discussion of the static and dynamic impact of free-trade areas, customs unions, etc.

Case Study: The Canadian-U.S. Free Trade Agreement. *With Michael Wilson, former Canadian Minister of Finance, Trade; Herb Gray, Member, Canadian Parliament; Wayne MacLeod, President, CFL Industries; Clayton Yeutter, former U.S. Trade Representative.*

Case Study: The Entry of the United Kingdom into the EC and its impact on trade with Australia. *With Graham Bligh, Australian Farmers Federation; Ansdrew Stoekal, Head, Australia's Center for International Economics.*

PROGRAM 5: Labor and Capital Mobility

Learning Objectives

- International movement of factors of mobility (labor, capital, and technology) has been a powerful force behind economic integration worldwide.
- International labor migration can occur for economic and noneconomic reasons and can have large impacts on countries of origin and destination.
- Factor movements can substitute for trade based on comparative advantage.

Discussion of the international mobility of capital, labor, and technology, examining the relationship between trade in goods (and services), the mobility of factors of production, and the pressures that drive and inhibit labor migration.

Case Study: Guest workers and immigrants in The Netherlands. *Interviews with immigrant Turkish workers and Dutch employers.*

Case Study: Mexican immigration to the U.S. and the Maquiladora Program. *With Patricia Fernandez Kelly, Institute for Policy Studies, Johns Hopkins University; Steve Knaebel, President, Cummins-Mexico.*

PROGRAM 6: Multinational Corporations

Learning Objectives

- Multinationals have been one of the engines of globalization by engaging in direct foreign investment and technology transfer.
- Multinationals exist when there are specific attributes that can earn profits in a number of countries and/or when location considerations show that overall costs can be lowered by producing in different countries.

Multinational corporations are examined as a vehicle for the movement of capital and transfer of technology. Part of the discussion centers on the controversies often accompanying the activities of multinationals.

Case Study: Direct investment by a Swedish corporation in Hungary. *With Ildiko Magyar, Small Business Manager; Zslot Huszar, Marketing Manager, Ericsson; Lars Erik Hillborn, General Manager, Ericsson Technika; Istvan Fodor, General Manager, Ericsson Technika.*

Case Study: A comparison of Smith-Corona and Brother corporations. *With Patrick Gilmore, President, Brother Industries; Lee Thompson, Chairman, Smith-Corona; William Niskanen, former member, Council of Economic Advisors; Clyde Prestowitz, former Counselor for Japan Affairs to U.S. Secretary of Commerce.*

PROGRAM 7: Fixed Versus Floating Exchange Rates

Learning Objectives

- In the 20th century, there have been numerous attempts to devise both fixed and flexible (floating) exchange rate systems. Currently most countries' rates are neither completely fixed nor completely flexible.
- The system of flexible but managed exchange rates in the '70s and '80s seems to have coped well with external shocks (e.g., oil crises), but it has failed to restrain countries from running large trade imbalances.
- Movements in exchange rates can have large impacts on imports, exports, the rate of inflation, interest rates, and distribution of income.

While considering the strengths and weaknesses of fixed and floating exchange rates, the discussion concentrates on the role of exchanges as shock absorbers and on the cost of exchange rate fluctuations.

Case Study: The impact of U.S. dollar fluctuations in the 1980s: Komatsu vs. Caterpillar
With Mashahiro Sakane, President & COO, Komatsu-Dresser Company; James Wogsland, Vice Chairman, Caterpillar, Inc.; Frank Manfredi, Editor, Machinery Outlook.

Case Study: Floating exchange rates and petrodollar recycling in the 1970s. *With George P. Schultz, former U.S. Secretary of the Treasury; Paul Krugman, M.I.T; Edward Bernstein, former Staff Economist, U.S. Treasury Department Delegation to Bretton Woods Conference.*

PROGRAM 8: Managing Currencies and Policy Coordination

Learning Objectives

- Given the costs associated with fluctuating exchange rates, countries try to manage their currencies by changing their macroeconomic policies (usually monetary policy) or by intervening directly in the foreign exchange markets.
- International policy coordination is desirable for the smooth functioning of the international financial system and the global economy; there are limits to coordination, however, due to differing national goals, disagreements over the distribution of gains, and financial constraints.
- Fixed or semi-fixed exchange rates have provided stability during the past 40 years, but they have also precipitated a number of dramatic crises.

An examination of what motivates governments to manage currencies and coordinate policies and the limitations to government intervention in foreign exchange matters (as seen by recent events in the U.S. and Europe)

Case Study: The Plaza and Louvre Accords.
With James A. Baker, former U.S. Secretary of State; Paul Krugman, Professor of Economics, M.I.T.; Toyoo Gyohten, former Director of International Finance, Japanese Ministry of Finance; Gerhard Stoltenberg, former German Minister of Finance.

Case Study: The Cost to the U.K. of Joining the European Monetary System *With Dr. W.F. Duisenberg, President, Central Dutch Bank; Sir Alan Walters, advisor to former Prime Minister Margaret Thatcher; Karl Otto Pohl, former President, Central German Bank; George Soros, currency speculator; John Smith, Member, British Parliament.*

PROGRAM 9: Exchange Rates, Capital Flight, and Hyperinflation

Learning Objectives

- An exchange rate is the price of a country's currency in terms of another country's; appreciating when its value is rising, depreciating when falling.
- Exchange rates are influenced by interest rates, inflation rates, trade balances, and market expectations.
- Credibility of government policies, investor confidence, and capital flows also have short- and long-term effects on exchange rates.

An analysis of the factors that affect exchange rates, focusing on the impact of international capital flows, inflation, and trade flows.

Case Study: Mexico and the money center banks: capital flight and return. *With Abel Beltran del Rio, President, Ciemex-WEFA (economics consultants).*

Case Study: Hyperinflation in Argentina. *With Roque Fernandez, Head, Argentina Central Bank; José Luis Machinea, former Head, Argentina Central Bank; Ricardo Esteves, Director, The Bunge and Born Group.*

PROGRAM 10: Developing Countries

Learning Objectives

- Although the level and rate of economic development in developing countries depend primarily on internal conditions, international trade can contribute significantly to the development process.
- Developing countries that have adopted export promotion policies have prospered; those pursuing import-substituting industrialization have not.
- The challenge for industrial nations is how to help poorer countries: give them aid or open up their own economies to imports from developing countries.

Examination of how developing nations have been helped (or hurt) by rapid growth in trade and factor mobility during the post-WWII period, with discussion of the steps that can be taken to integrate developing countries into the global economy.

Case Study: Comparison of development policies in South Korea and Sri Lanka. *With Edward Chen, Professor, Hong Kong University Center for Asian Studies; Dr. Kim Kiwhan, former Director, Korean Development Institute; Premachandra Atukorala, Sri Lankan economist.*

Case Study: Tanzania: the policies of aid versus trade. *With Dale Pfeiffer, Head, U.S. AID; Joshua Doriye, former economic advisor to Julius Nyrerere.*

PROGRAM 11: Economies in Transition

Learning Objectives

- For decades the lack of meaningful domestic prices, inconvertibility of their currencies, and the planned nature of their economies isolated the former Communist countries (FCCs) from the world economy.
- Due to their long history of poor macro and microeconomic policies, FCCs have a much bigger challenge than developing countries in liberalizing their economies and integrating into the global economy.
- Many of these countries are struggling with the important question of whether the process of reform should be swift or gradual.

Examination of the transformation of former Communist countries into market economies, with assessment of the micro and macroeconomic policies needed to ensure their successful reintegration into the global economy.

Case Study: Russia: the fate of state industries vs. private entrepreneurs. *With Grigori Javinski, Russian economist; Boris Nemtsov, Governor, Nizhny Novgorod; Viktor Kostromin, Director, Pavlovo bus factory.*

Case Study: Poland—the transition process to a market economy: shock therapy. *With Wes J. Skrowski, Senior Vice President, Benckiser; Elzbieta Pajak, factory worker.*

PROGRAM 12: The Environment

Learning Objectives

- The environment is a public good that crosses national borders.
- The cleanup of transnational pollution is complicated by questions about property rights and burden-sharing that require international cooperation.
- In recent years, differing environmental priorities have caused problems for international trade, but free trade and environmental protection are not inherently conflicting goals.

A look at the international dimension of environmental problems, focusing on transnational pollution, international property rights, and perceived differences between trade and environmental protection.

Case Study: The U.S.-Mexico agreement on dolphin-safe tuna fishing. *With David Phillips, President, Earth Island Institute; Felipe Charat, owner of Mexican tuna fleet; Carlos Camacho Gaos, Mexican Undersecretary of Fisheries Development; Rufus Yerxa, former U.S. Ambassador to GATT; Richard Elgin, Director, GATT Trade and Development Section.*

Case Study: The transnational implications of pollution along the Rhine River. *With S. de Wit, Researcher, Dutch Ministry of Public Works; M.K.H. Gast, Director, Amsterdam Water Works; J. Strik, Dutch pepper grower; Neelie Kroes, former Dutch Minister of Transport and negotiator, Rhine Salt Treaty.*

PROGRAM 13: The Evolving World Economy

Learning Objectives

- Human capital (e.g., education and training) will be a key determinant of changes in living standards in the future as trade in products with a high information and innovation content rises rapidly.
- As economies evolve and become more mature, their comparative advantage may shift away from manufacturing to knowledge-intensive (including service) industries.
- Countries that take advantage of these trends are the ones that will prosper in the coming decades.

Exploration of the dynamic aspects of comparative advantage, the evolutionary nature of trade competitiveness, and the importance of human capital as industrialized countries shift from manufacturing to service and knowledge-intensive industries.

Case Study: The rise of U.S. dominance of the global software market. *With Jeff Braun, President, Maxis Inc.; Howard Anderson, Managing Director, The Yankee Group.*

Case Study: The rise of East Asia (particularly China) as an economic power. *With Edward Chen, Professor, Hong Kong University Center for Asian Studies; Charles Yeung, Chinese businessman.*

INTERNATIONAL ECONOMICS

5th Edition

by Robert J. Carbaugh

CHAPTER 5

Tariffs

KEY CONCEPTS AND TERMS

Ad valorem tariff
Arguments for trade restrictions
Bonded warehouse
Compound tariff
Consumer surplus
Consumption effect
Cost-insurance-freight (CIF) valuation
Customs valuation
Deadweight loss
Domestic revenue effect
Effective tariff rate
Foreign trade zone (FTZ)
Free-on-board (FOB) valuation
Free-trade argument
Free-trade-biased sector
How a tariff burdens exporters
Infant-industry argument
Large-nation model
Level playing field
Nominal tariff rate
Offshore-assembly provision
Producer surplus
Protection-biased sector
Protective effect
Protective tariff
Redistribution effect
Revenue effect
Revenue tariff
Small-nation model
Specific tariff
Tariffs
Tariff escalation
Tariff quota
Tariff welfare effects
Terms-of-trade effect
Windfall profits

The conclusion of the trade models presented so far is that free trade leads to the most efficient use of world resources. When nations specialize according to the comparative-advantage principle, the level of world output is maximized. Not only does free trade enhance world welfare, but it can also benefit each participating nation. Every nation can overcome the limitations of its own productive capacity to consume a combination of goods that exceeds the best it can produce in isolation.

Despite the power of the free-trade argument, however, free trade policies meet major resistance among those companies and workers who face losses in income and jobs because of import competition. Policymakers are torn between the appeal of greater global efficiency made possible by free trade and the needs of the voting public whose main desire is to preserve short-run interests such as employment and income. The benefits of free trade may take years to achieve and are spread out over wide segments of society, whereas the costs of free trade are immediate and fall on specific groups (for example, workers in the import competing industry).

In today's world, restrictions on the flow of goods and services in international trade are widespread. This chapter considers one type of restriction, tariffs, and their impact on trade.

THE TARIFF CONCEPT

Tariffs are simply taxes (duties) levied on products when they cross national boundaries. The most widespread tariff is the *import tariff*, which is a tax levied on an imported product. A less common tariff is an *export tariff*, which is a tax imposed on an exported product. Export tariffs have often been used by developing nations. For example, cocoa exports have been taxed by Ghana and oil exports have been taxed by the Organization of Petroleum Exporting Countries (OPEC) in order to raise revenue or promote scarcity in global markets and hence increase the world price.

Did you know that the United States cannot levy export tariffs? When the U.S. Constitution was written, Southern cotton-producing states feared that Northern textile-manufacturing states would pressure the federal government into levying export tariffs to depress the price of cotton: an export duty would lead to decreased exports and thus a falling price of cotton within the United States. As the result of negotiations, the Constitution was worded so as to prevent export taxes: "No Tax or Duty shall be laid on Articles exported from any State."

Tariffs may be imposed for protection or revenue purposes. A **protective tariff** is designed to insulate import-competing producers from foreign competition. Although a protective tariff generally is not intended to totally prohibit imports from entering the country, it does place foreign producers at a competitive disadvantage when selling in the domestic market. A **revenue tariff** is imposed for the purpose of generating tax revenues and may be placed on both exports and imports.

Over time, tariff revenues have decreased as a source of government revenue for industrial nations including the United States. In 1900, tariff revenues constituted more than 41 percent of U.S. government receipts; by 1990, the figure had fallen to 1.6 percent. However, many developing nations currently rely on tariffs as a major source of government revenue. Table 5.1 shows the percentage of government revenue resulting from tariffs for selected nations.

Specific, Ad Valorem, and Compound Tariffs

Tariffs can be specific, ad valorem, or compound, as seen in Table 5.2. A **specific tariff** is expressed in terms of a fixed amount of money per physical unit of the imported product. For example, a U.S. importer of a German computer may be required to pay a duty to the U.S. government of $100 per computer, regardless of the computer's price. An **ad valorem tariff**, like a sales tax, is expressed as a fixed percentage of the value of the imported product. Suppose that an ad valorem duty of 15 percent is levied on imported trucks. A U.S. importer of a Japanese truck valued at $20,000 would be required to pay a duty of $3,000 to the government ($20,000 × 15% = $3,000). A **compound tariff** is a combination of a specific and an ad valorem tariff. For example, a U.S. importer of a television might be required to pay a duty of $20 plus 5 percent of the value of the television.

What are the relative merits of specific, ad valorem, and compound tariffs?

Specific tariff. As a fixed monetary duty per unit of the imported product, a specific tariff is relatively easy to apply and administer, particularly to standardized commodities and staple products. A main disadvantage of a specific tariff is that the degree of protection it affords domestic producers varies *inversely* with changes in import prices. For example, a specific tariff of $1,000 on autos will discourage

TABLE 5.1 / Tariff Revenues as a Percentage of Government Revenues, 1990: Selected Countries

Developing Countries	Percentage	Industrial Countries	Percentage
Tunisia	75.3%	Iceland	13.5%
Cameroon	61.2	Switzerland	7.7
Solomon Islands	56.7	Ireland	7.1
Tonga	50.6	Australia	4.6
Mali	47.2	Canada	3.8
Seychelles	45.4	United States	1.6
Bangladesh	42.6	Norway	0.5
Senegal	41.9	United Kingdom	0.1

SOURCE: International Monetary Fund, *Government Finance Statistics Yearbook* (Washington, D.C.: Author, 1991).

TABLE 5.2 / Selected U.S. Tariffs

Product	Duty Rate
Watch cases	15 cents each
Mercury	16.5 cents/kg
Safety fuses	$1.18 per 1,000
Machine screws	1 cent/kg
Frozen hams	2.2 cents/kg
Squash	2.4 cents/kg
Cough drops	3.9% ad valorem
Auto tires	4% ad valorem
Ski gloves	3.5% ad valorem
Plywood	8% ad valorem
Station wagons	2.5% ad valorem
Babies' T-shirts	21% ad valorem
Woven fabrics	48.5 cents/kg + 38% ad valorem
Ethyl alcohol	6.6 cents/kg + 3% ad valorem
Men's overcoats	77.2 cents/kg + 20% ad valorem
Wool gloves	33.1 cents/kg + 7.4% ad valorem
Boys' shirts	52.9 cents/kg + 21% ad valorem
Hedge shears	1 cent each + 2.8% ad valorem

SOURCE: U.S. International Trade Commission, *Tariff Schedules of the United States* (Washington, D.C.: Government Printing Office, 1992).

imports priced at $15,000 per auto to a greater degree than those priced at $20,000. During times of inflating import prices, a given specific tariff loses some of its protective effect. On the other hand, a specific tariff has the advantage of providing domestic producers more protection during a business recession, when cheaper products are purchased.

Ad valorem tariff. Ad valorem tariffs usually lend themselves more satisfactorily to manufactured goods, because they can be applied to products with a wide range of grade variations. As a percentage applied to a product's value, an ad valorem tariff can distinguish among small differentials in product quality to the extent that they are reflected in product price. Under a system of ad valorem tariffs, a person importing a $20,000 Datsun (Nissan) would have to pay a higher tariff duty than a person importing a $19,900 Toyota. The person would likely pay the same duty under a system of specific tariffs.

Another advantage of an ad valorem tariff is that it tends to maintain a constant degree of

protection for domestic producers during periods of changing prices. If the tariff rate is 20 percent ad valorem and the imported product price is $200, the duty is $40. If the product's price increases, say, to $300, the duty collected rises to $60; if the product price falls to $100, the duty drops to $20. An ad valorem tariff yields revenues proportionate to values, maintaining a constant degree of relative protection at all price levels. An ad valorem tariff is similar to a proportional tax in that the real proportional tax burden or protection does not change as the tax base changes. In recent decades, ad valorem duties have been used more often than specific duties in response to global inflation and the rising importance of world trade in manufactured products.

Determination of duties under the ad valorem principle at first appears to be simple, but in practice it has suffered from administrative complexities. The main problem has been trying to determine the value of an imported product, a process referred to as **customs valuation**. Import prices are estimated by customs appraisers, who may disagree on product values. Moreover, import prices tend to fluctuate over time, which makes the valuation process rather difficult.

Another customs-valuation problem stems from the variety of methods used to determine a commodity's value. For example, the United States has traditionally used **free-on-board (FOB) valuation**, whereby the tariff is applied to a product's value as it leaves the exporting country. But European countries have traditionally used a **cost-insurance-freight (CIF) valuation**, whereby ad valorem tariffs are levied as a percentage of the imported commodity's total value as it arrives at its final destination. The CIF price thus includes transportation costs such as insurance and freight.

Compound tariff. Compound duties are often applied to manufactured products embodying raw materials that are subject to tariffs. In this case, the "specific" portion of the duty neutralizes the cost disadvantage of domestic manufactures that results from tariff protection granted to domestic suppliers of raw materials, and the "ad valorem" portion of the duty grants protection to the finished-goods industry. In the United States, for example, there is a compound duty on woven fabrics (for example, 50 cents per kilogram plus 20 percent). The specific portion of the duty (50 cents) compensates U.S. fabric manufacturers for tariff protection granted to U.S. cotton producers, while the ad valorem portion of the duty (20 percent) provides protection for their own woven fabrics.

Effective Rate of Protection

A main objective of an import tariff is to protect domestic producers from foreign competition. By increasing the domestic price of an import, a tariff serves to make home-produced goods more attractive to resident consumers. Output in the import-competing industry can thus expand beyond what would exist in the absence of a tariff. The degree of protection afforded by a tariff reflects the extent to which domestic prices can rise above foreign prices without the home producers' being priced out of the market.

The **nominal tariff rate** published in a country's tariff schedule give us a general idea of the level of protection afforded the home industry. But it may not always truly indicate the actual or effective protection given. For example, it is not necessarily true that a 25-percent import tariff on an automobile provides the domestic auto industry a protective margin of 25 percent against foreign producers. This is because the nominal tariff rates apply only to the total value of the final import product. But in the production process, the home import-competing industry may use imported material inputs or intermediate products that are subject to a different tariff than that on the final product; in this case, the **effective tariff rate** will differ from the nominal tariff rate.[1]

TABLE 5.3 / The Effective Rate of Protection

Foreign Radio Import	*Cost*	*Domestic Competing Radio*	*Cost*
Component parts	80	Component parts	80
Assembly activity (value added)	20	Assembly activity (value added)	30(?)
Nominal tariff	10	Domestic price	110
Import price	110		

The effective tariff rate is an indicator of the actual level of protection that a nominal tariff rate provides the domestic import-competing producers. It signifies the *total increase in domestic productive activities (value added) that an existing tariff structure makes possible,* compared with what would occur under free-trade conditions. The effective rate tells us how much more expensive domestic production can be relative to foreign production and still compete in the market.

Assume that the domestic radio industry adds value to imported inputs by assembling component radio parts imported from abroad. Suppose the imported components can enter the home country on a duty-free basis. Suppose also that 20 percent of a radio's final value can be attributed to domestic assembly activities (value added), the remaining 80 percent reflecting the value of the imported components. Furthermore, let the cost of the radio components be the same for both the domestic country and the foreign country. Finally, assume that the foreign country can produce a radio for $100.

Suppose the home country imposes a nominal tariff of 10 percent on finished radios, so that the domestic import price rises from $100 to $110 per unit (Table 5.3). Does this mean that home producers are afforded an effective rate of protection equal to 10 percent? Certainly not! Because the imported component parts enter the country duty-free (at a nominal tariff rate less than that on the finished import product), the effective rate of protection is 50 percent. Compared with what would exist under free trade, domestic radio producers can be 50-percent more costly in their assembly activities and still be competitive!

To see this, examine Table 5.3. Under free trade (zero tariff), a foreign radio could be imported for $100. To meet this price, domestic producers would have to hold their assembly costs down to $20. But under the protective umbrella of the tariff, domestic producers can afford to pay up to $30 for assembly and still meet the $110 domestic price of imported radios. The result is that domestic assembly costs could rise to a level of 50 percent above what would exist under free-trade conditions:

$$(\$30 - \$20)/\$20 = 0.5$$

In general, the effective tariff rate is given by the following formula:

$$e = \frac{n - ab}{(1 - a)}$$

where
e = the effective rate of protection
n = the nominal tariff rate on the final product
a = the ratio of the value of the imported input to the value of the final product
b = the nominal tariff rate on the imported input

When the values from the radio example are plugged into the formula, we obtain

$$e = \frac{0.1 - 0.8(0)}{1 - 0.8}$$
$$= 0.5$$

The nominal tariff rate of 10 percent levied on the final import product thus affords domestic production activities an effective degree of protection equal to 50 percent—five times the nominal rate.

Two consequences of the effective-rate calculation are worthy of mention. First, the degree of effective protection increases as the value added by domestic producers declines (the ratio of the value of the imported input to the value of the final product increases). In the formula, the higher the value of *a*, the greater the effective protection rate for any given nominal tariff rate on the final product. Second, a tariff on imports used in the production process reduces the level of effective protection. The higher the value of *b*, the lower the effective protection rate for any given nominal tariff on the final product. In the formula, as *b* rises, the numerator of the formula decreases, and hence *e* decreases.

Generalizing from this analysis, *when material inputs or intermediate products enter a country at a very low duty while the final imported commodity is protected by a high duty, the result tends to be a high protection rate for the domestic producers.* The nominal tariff rate on finished goods thus understates the effective rate of protection. But should a tariff be imposed on imported inputs that exceeds that on the finished good, the nominal tariff rate on the finished product would tend to overstate its protective effect. Such a situation might occur if the home government desired to protect raw material suppliers more than domestic manufacturers.

Tariff Escalation

As illustrated in Table 5.4, in many industrialized nations the effective rate of protection is several times the nominal rate. The apparently low nominal tariffs on the final import products may thus *understate* the effective rate of protection, which takes into account the effects of tariffs levied on raw materials and intermediate goods. In addition, the industrialized nations' tariff structures have generally been characterized by an escalation of tariff rates to permit higher degrees of protection on intermediate and finished products than on primary commodities. This is commonly referred to as **tariff escalation**. Although raw materials are often imported at zero or low tariff rates, the nominal and effective protection increases at each stage of production. Many industrialized nations afford a relatively high degree of protection to their manufacturing sector, as suggested in Table 5.5.

The tariff structures of the industrialized nations may indeed discourage the growth of processing and manufacturing industries in the less developed nations. The industrialized nations' low tariffs on primary commodities encourage the developing nations to expand operations in these sectors, while the high protective rates levied on manufactured goods pose a significant entry barrier for any developing nation wishing to compete in this area. From the point of view of the less developed nations, it may be in their best interest to discourage disproportionate tariff reductions on primary commodities. The effect of these tariff reductions is to magnify the discrepancy between the nominal and effective tariffs of the industrialized nations, worsening the potential competitive position of the less developed nations in the manufacturing and processing sectors.

OFFSHORE-ASSEMBLY PROVISION

An interesting feature of U.S. tariff policy is the **offshore-assembly provision** (OAP). Under OAP, when a finished component originating in the United States (such as a semiconductor) is sent overseas and there assembled with one or

TABLE 5.4 / Nominal and Effective Tariff Rates

Product	*United States*		*Japan*		*European Community*	
	Nominal Rate (%)	*Effective Rate (%)*	*Nominal Rate (%)*	*Effective Rate (%)*	*Nominal Rate (%)*	*Effective Rate (%)*
Agriculture, forestry, fish	1.8	1.9	18.4	21.4	4.8	4.1
Food, beverages, tobacco	4.7	10.6	25.4	50.3	10.1	17.8
Textiles	9.2	18.0	3.3	2.4	7.2	8.8
Wearing apparel	22.7	43.3	13.8	42.2	13.4	19.3
Leather products	4.2	5.0	3.0	-14.8	2.0	-2.2
Footwear	8.8	15.4	15.7	50.0	11.6	20.1
Wood products	1.6	1.7	0.3	-30.6	2.5	1.7
Furniture and fixtures	4.1	5.5	5.1	10.3	5.6	11.3
Paper and paper products	0.2	-0.9	2.1	1.8	5.4	8.3
Printing and publishing	0.7	0.9	0.1	-1.5	2.1	-1.0
Chemicals	2.4	3.7	4.8	6.4	11.7	-0.7
Petroleum and related products	1.4	4.7	2.2	4.1	3.4	0.1

* Following the completion of the Tokyo Round of Multilateral Trade Negotiations in 1979.

SOURCE: Alan Deardorff and Robert Stern, "The Effects of the Tokyo Round on the Structure of Protection." In R. Baldwin and A. Krueger, *The Structure and Evolution of Recent U.S. Trade Policy* (Chicago: University of Chicago Press, 1984), pp. 368–377.

more other components to become a finished good (such as a television), the cost of the U.S. component is not included in the dutiable value of the imported assembled article into which it has been incorporated. U.S. import duties thus apply only to the *value added in the foreign assembly process,* provided that U.S.-made components are used by overseas companies in their assembly operations. In like manner, the OAP applies to U.S. metal articles processed abroad and returned to the United States for further processing. The OAP is used most frequently as a means for U.S. manufacturers to reduce their costs so as to be competitive with overseas producers.

In recent years, major manufactured products entering the United States under OAP have included motor vehicles, office machines, and television receivers. These articles are assembled primarily in Mexico and Germany. Aluminum cans and semiconductors are the main metal articles assembled abroad and returned for further processing in the United States under OAP. Japan, Canada, Mexico, and Malaysia account for most of these items shipped to the United States.

The OAP provides potential advantages for the United States and its trading partners. By reducing import tariffs on foreign-assembled goods embodying U.S. components, OAP provides incentives for foreign manufacturers desiring to export to the United States to purchase inputs from U.S. sources. The OAP also encourages U.S. consumers to purchase imports assembled by those foreign companies that use U.S. components. The OAP is especially significant

TABLE 5.5 / Escalation of Tariff Protection by Production Stages: Nominal Tariffs*

Production Stages	United States (%)	Japan (%)	European Community (%)
Meat products			
Fresh and frozen meat	1.6	10.1	6.6
Prepared meat	2.3	22.5	17.9
Fruit			
Fresh fruit	1.1	21.5	7.7
Prepared fruit	20.3	21.8	16.6
Chocolate			
Cocoa beans	0.0	0.0	1.9
Powder and butter	0.1	2.9	9.0
Chocolate	0.1	24.3	0.1
Leather			
Hides and skins	0.8	0.0	0.0
Leather	3.7	8.5	2.4
Leather products	9.2	12.4	5.5

* Post–Tokyo Round tariffs.

SOURCE: J. Finger and A. Olechowski, eds., *The Uruguay Round* (Washington, D.C.: World Bank, 1987).

to developing nations that are striving to industrialize and require export markets for their goods. These nations' products can become more competitive in the United States if they use U.S. inputs in their assembly operations.

POSTPONING IMPORT DUTIES

Import duties may have unintended side effects for some businesses. For example, duties may discourage a company from importing goods in amounts large enough to take advantage of quantity discount pricing. Before imported goods are released by the U.S. Customs Service, import duties must be paid, or a bond must be posted to guarantee their payment. Up-front payment of these duties may impose financial hardships on importers.

Consider a U.S. assembler who uses imported components. By purchasing its annual requirement of components at one time and shipping it in bulk, the firm could reduce the cost of the imported components. Paying the import duty on the entire year's supply of components at one time, however, may be too expensive for the importer. U.S. trade laws mitigate the effects of import duties by allowing U.S. importers to postpone and prorate over time their duty obligations through bonded warehouses and foreign trade zones.

Bonded Warehouse

According to U.S. tariff law, dutiable imports can be brought into a customs territory and left in a bonded warehouse, duty-free. These storage facilities are operated under the lock and

key of the U.S. Customs Service. Owners of storage facilities must be bonded to ensure that they will satisfy all customs duty obligations.

Imported goods can be stored, repacked, or further processed in the bonded warehouse. As long as the products are kept in the bonded warehouse, the duty obligation is postponed. The goods may be later sold duty-free overseas or withdrawn for domestic sale upon payment of import duties. When goods are processed in a bonded warehouse with additional domestic materials and enter the domestic market at a later date, only the import portion of the finished good is subject to customs duties.

Bonded warehouses are sometimes used for reexportation. Imported goods are stored in the bonded warehouse until suitable foreign markets can be found. If these goods are not stored in a bonded warehouse, the importer must pay duty on them when they enter the country. The importer can then claim a refund of 99 percent of the duties paid, referred to as a *drawback*, after they have been reexported. By using a bonded warehouse, however, a business can avoid the delay and costs associated with customs clearance and drawback application connected with reexport.

Foreign Trade Zones

Because of inspection and surveillance by the U.S. Customs Service, storage in bonded warehouses is generally more costly than in ordinary storage facilities. As a less expensive alternative, the U.S. government permits importers to use a **foreign trade zone** (FTZ). FTZs enlarge the benefits of a bonded warehouse by eliminating the restrictive aspects of customs surveillance and by offering more suitable manufacturing facilities.

An FTZ is a site within the United States where foreign merchandise can be imported *without* formal U.S. customs entry (payment of customs duties) or government excise taxes. FTZs are intended to stimulate international trade, attract industry, and create jobs by providing an area that gives users tariff and tax breaks. Merchandise in the zone can be stored, used in manufacturing or assembling a final product, or handled in several other ways.

In 1970, there were 17 FTZs in the United States; today, there are more than 240. Many are situated at seaports, but some are located at inland distribution points. Despite their growing importance, FTZs account for only about 2 percent of the merchandise exports and imports of the United States. Among the businesses that enjoy FTZ status are Caterpillar, Chrysler, Eli Lilly and Co., General Electric, and International Business Machines (IBM).

By offering cost savings to U.S. importers and exporters, FTZs encourage international competitiveness. Companies importing merchandise into an FTZ enhance their cash flow because they do not pay customs duties or federal excise taxes until the goods are shipped out of the zone to U.S. markets. If a good is shipped from an FTZ to a foreign country, no U.S. import duty is imposed on the good. For example, in an FTZ located in Seattle, optical equipment is assembled combining lenses from Japan, prisms from Germany, plastic castings from the United Kingdom, precision mechanisms from Switzerland, and control instruments from France. In an FTZ located in Kansas City, Kansas, pool tables and related equipment are produced using frames from the United States, slate from Italy, balls from Belgium, rubber from Japan, and cue sticks from Taiwan. U.S. Customs Service officials monitor the FTZs by performing audits and spot inspections.

Besides seeing FTZs as a mechanism to reduce costs on imported components through deferral of duty payment, manufacturers have sought FTZ status to obtain relief from "inverted" tariff schedules that place higher duty rates on imported inputs than on the industry's final product. Manufacturers in the FTZ can reduce tariff liability on components or raw materials with higher duty rates by zone processing or assembly into finished goods that enter the U.S. market at a lower duty rate. For

example, Volkswagen of America pays only a 2.9-percent import duty on the Rabbit, which it assembles in its New Stanton (Pennsylvania) FTZ, instead of the 6-percent duty that would be levied on imported components.

TARIFF WELFARE EFFECTS: CONSUMER AND PRODUCER SURPLUS

To analyze the effect of trade policies on national welfare, it is useful to separate the effects on consumers from those on producers. For each group, a measure of welfare is needed; these measures are known as consumer surplus and producer surplus.

Consumer surplus refers to the difference between the amount that buyers would be willing and able to pay for a good and the actual amount they do pay. To illustrate, assume the price of a Pepsi is $.50. Being especially thirsty, suppose you would have been willing to pay up to $0.75 for a Pepsi. Your consumer surplus on this purchase is $.25 ($.75 - $.50 = $.25). For all Pepsis bought, consumer surplus is merely the sum of the surplus for each unit.

Consumer surplus can also be depicted graphically. Let us first remember that (1) the height of the market demand curve indicates the maximum price that buyers are willing and able to pay for each successive unit of the good, and (2) in a competitive market, buyers pay a single price (the equilibrium price) for all units purchased. Referring now to Figure 5.1, assume the market price of gasoline is $2 per gallon. If buyers purchase 4 gallons at this price, they spend $8, represented by area *ACED*. For those 4 gallons, buyers would have been willing and able to spend $12, as shown by area *ABCED*. The difference between what buyers must spend and the amount they were willing and able to spend is consumer surplus; in this case, it equals $4 and is denoted by area *ABC*. The size of consumer surplus is affected by the market price. A decrease in the market price will lead to an increase in the quantity purchased and a larger consumer surplus. Conversely, a higher market price will reduce the amount purchased and shrink the consumer surplus.

Let us now consider the other side of the market: producers. **Producer surplus** is the revenue producers receive over and above the minimum amount required to induce them to supply the good. This minimum amount has to cover the producer's total variable costs. Recall that total variable cost equals the sum of the marginal cost of producing each successive unit of output.

In Figure 5.2, producer surplus is represented by the area above the supply curve of gasoline and below the good's market price. Recall that the height of the market supply curve indicates the least price at which producers will be willing to supply gasoline; this minimum price increases with the level of output because of rising marginal costs. Suppose the market price of gasoline is $2 per gallon, and 4 gallons are supplied. Producers receive revenues totaling $8, represented by area *ACDB*. The minimum revenue they must receive to produce 4 gallons equals total variable cost, which equals $4 and is depicted by area *BCD*. Producer surplus is the difference, $4 ($8 - $4 = $4), and is depicted by *ABC*.

If the market price of gasoline rises, more gasoline will be supplied, and producer surplus rises. It is equally true that if the market price of gasoline falls, producer surplus will fall.

In the following sections, we will use the concepts of consumer surplus and producer surplus to analyze the effects of import tariffs on the nation's welfare.

TARIFF WELFARE EFFECTS: SMALL-NATION MODEL

What are the effects of a tariff on a nation's welfare? Consider the case of a nation whose imports constitute a very small portion of the world market supply. This small nation would

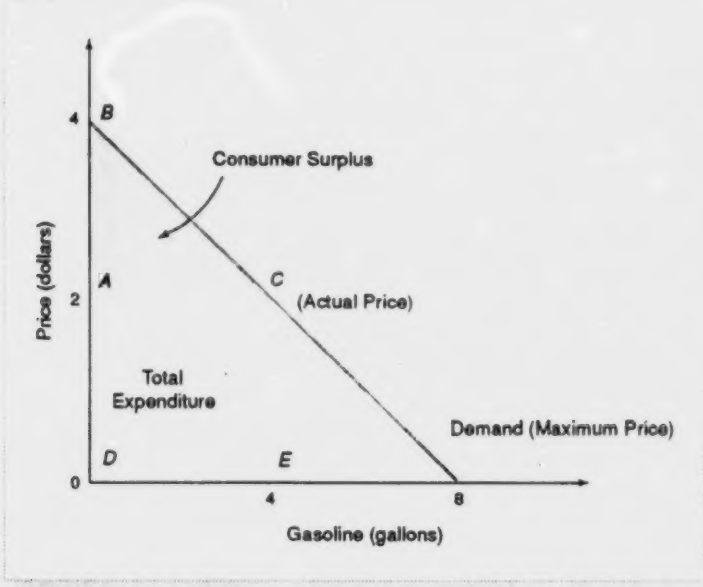


FIGURE 5.1 Consumer surplus. Consumer surplus is the difference between the maximum amount buyers are willing to pay for a given quantity of a good and the amount actually paid. Graphically, consumer surplus is represented by the area under the demand curve and above the good's market price.

be a *price taker,* facing a constant world price level for its import commodity. This is not a rare case: many nations are not important enough to influence the terms at which they trade.

In Figure 5.3, the small nation before trade produces at market equilibrium point *E,* as determined by the intersection of its domestic supply and demand schedules. At equilibrium price $9,500, the quantity supplied is 50 units, and the quantity demanded is 50 units. Now suppose that the economy is opened to foreign trade and that the world auto price, $8,000, is less than the domestic price. Because the world market will supply an unlimited number of autos at price $8,000, the world supply schedule would appear as a horizontal (perfectly elastic) line. Line S_{d+w} shows the supply of autos available to the small-nation consumers from domestic and foreign sources combined. This overall supply schedule is the one that would prevail in free trade.

Free-trade equilibrium is located at point *F* in the figure. Here the number of autos demanded is 80 units, whereas the number produced domestically is 20 units. The excess domestic auto demand is fulfilled by imports of 60 autos. Compared with the situation before trade occurred, free trade results in a fall in the domestic auto price from $9,500 to $8,000. Consumers are better off because they can import more autos at a lower price. However, domestic producers now sell fewer autos at a lower price than they did before trade.

Under free trade, the domestic auto industry is being damaged by foreign competition. Industry sales and revenues are falling, and workers are losing their jobs. Suppose manage-

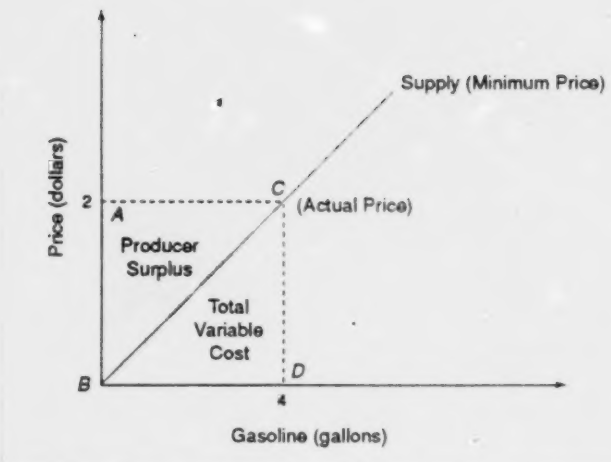


FIGURE 5.2 Producer surplus. Producer surplus is the revenue producers receive over and above the minimum necessary for production. Graphically, producer surplus is represented by the area above the supply curve and below the good's market price.

ment and labor unite and convince the government to levy a protective tariff on auto imports. Assume the small nation imposes a tariff of $1,000 on auto imports. Because this small nation is not important enough to influence world market conditions, the world supply price of autos remains constant, unaffected by the tariff. This means that the small nation's terms of trade remains unchanged. The introduction of the tariff raises the home price of imports by the full amount of the duty, and the increase falls entirely on the domestic consumer. The overall supply shifts upward from S_{d+w} to S_{d+w+t} by the amount of the tariff.

The protective tariff results in a new equilibrium quantity at point *G*, where the domestic auto price is $9,000. Domestic production increases by 20 units, whereas domestic consumption falls by 20 units. Imports decrease from their pretariff level of 60 units to 20 units. This reduction can be attributed to falling domestic consumption and rising domestic production. The effects of the tariff are to impede imports and protect domestic producers. But what are the tariff's effects on the *national welfare*?

Figure 5.3 shows that before the tariff was levied, *consumer surplus* equaled areas $a + b + c + d + e + f + g$. With the tariff, consumer surplus falls to areas $e + f + g$, an overall loss in consumer surplus equal to areas $a + b + c + d$. This change affects the nation's welfare in a number of ways. The welfare effects of a tariff are classified as the revenue effect, the redistribution effect, the protective effect, and the consumption effect. As might be expected, the tariff provides the government with additional tax revenue and benefits domestic auto producers; at the same time, however, it wastes resources and harms the domestic consumer.

The tariff's revenue effect represents the duty collections of the government. Found by multiplying the number of imports (20 units) times the tariff ($1,000), government revenue

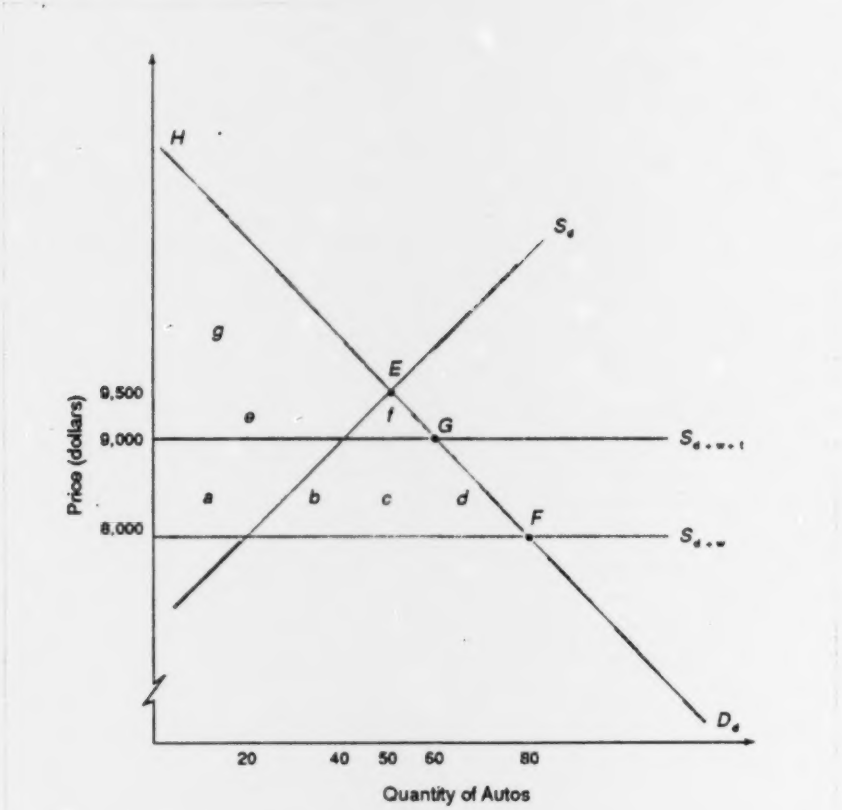


FIGURE 5.3 Tariff trade and welfare effects: small-nation model. For a small nation, a tariff placed on an imported product is shifted totally to the domestic consumer via a higher product price. Consumer surplus falls as a result of the price increase. The small nation's welfare decreases by an amount equal to the protective effect and consumption effect, the so-called deadweight losses due to a tariff.

equals area *c*, or $20,000. This represents the portion of the loss of consumer surplus, in monetary terms, that is transferred to the government. For the nation as a whole, the revenue effect does *not* result in an overall welfare loss; consumer surplus is merely shifted from the private to the public sector.

The **redistribution effect** is the transfer of consumer surplus, in monetary terms, to the domestic producers of the import-competing product. This is represented by area *a*, which equals $30,000. Under the tariff, domestic consumers will buy from domestic firms 40 autos at a price of $9,000, for a total expenditure of

Calculating the Welfare Effect of a Tariff

Figure 5.3 presents the welfare effects of a tariff in dollar terms. For example, the dollar value of the consumption effect (area *d*) equals $10,000. It is easy to carry out the calculation of triangular area *d*. Recall from geometry that the area of a triangle equals (base x height)/2. The height of the triangle ($1,000) equals the price increase in autos due to the tariff; the base (20 autos) equals the reduction in domestic consumption due to the tariff. The consumption effect is thus

$$\frac{20 \times \$1{,}000}{2} = \$10{,}000$$

Similarly, the dollar value of the protective effect (area *b*) equals $10,000. The height of the triangle equals the increase in price due to the tariff ($1,000); the triangle's base (20 autos) equals the increase in domestic auto production due to the tariff. The protective effect is thus

$$\frac{20 \times \$1{,}000}{2} = \$10{,}000$$

The calculation of all such "triangular" welfare effects of tariffs (and other protectionist devices) is based on this formula. The reader will find the formula useful for calculating the welfare effects of trade barriers in response to the study questions at the end of chapters.

$360,000. At the free-trade price of $8,000, the same 40 autos would have yielded expenditures of $320,000. The imposition of the tariff thus results in home producers' receiving additional revenues totaling areas *a* + *b*, or $40,000 (the difference between $360,000 and $320,000). As the tariff encourages domestic production to rise from 20 to 40 units, however, producers must pay part of the increased revenue as higher costs of producing the increased output, depicted by area *b*, or $10,000. The remaining revenue, $30,000, area *a*, is a net gain in producer income. The redistribution effect, therefore, is a transfer of income from consumers to producers. Like the revenue effect, it does *not* result in an overall loss of welfare for the economy.

Area *b*, totaling $10,000, is referred to as the **protective effect** of the tariff. It illustrates the loss to the domestic economy resulting from wasted resources used to produce additional autos at increasing unit costs. As the tariff-induced domestic output expands, resources that are less adaptable to auto production are eventually utilized, increasing unit production costs. This means that resources are used less efficiently than they would have been with free trade, in which case autos would have been purchased from low-cost foreign producers. A tariff's protective effect thus arises because less efficient domestic production is substituted for more efficient foreign production. Referring to Figure 5.3, as domestic output increases from 20 to 40 units, the domestic cost of producing autos rises, as shown by supply schedule S_d. But the same increase in autos could have been obtained at a unit cost of $8,000 before the tariff was levied. Area *b*, which depicts the protective effect, represents the loss to the economy.

Most of the consumer surplus lost because of the tariff has been accounted for: *c* went to the government as revenue; *a* was transferred to home suppliers as income; and *b* was lost by the economy because of inefficient domestic production. The consumption effect represented by

BEST COPY AVAILABLE

area *d*, which equals $10,000, is the residual not accounted for elsewhere. It arises from the decrease in consumption resulting from the tariff's artificially increasing the price of autos from $8,000 to $9,000. A loss of welfare occurs because of the increased price and lower consumption of autos. Like the protective effect, the consumer effect represents a *real* cost to society, not a transfer to other sectors of the economy. Together, these effects equal the deadweight loss of a tariff.

As long as it is assumed that a nation accounts for a negligible portion of international trade, its levying an import tariff necessarily lowers its national welfare. This is because there is no favorable welfare effect resulting from the tariff that would offset the deadweight loss of consumer surplus. If a nation could impose a tariff that would improve its terms of trade vis-à-vis its trading partners, it would enjoy a larger share of the gains from trade. This would tend to increase its national welfare, offsetting the deadweight loss of consumer surplus. Because it is so insignificant relative to the world market, however, a small nation is unable to influence the terms of trade. Levying an import tariff, therefore, *reduces* a small nation's welfare.

TARIFF WELFARE EFFECTS: LARGE-NATION MODEL

Now consider the case in which an importing nation accounts for a significant portion of the world market. This large nation, as a consumer, is important enough to affect the terms at which it trades. Changes in a large nation's domestic economic conditions or trade policies, therefore, can influence the distribution of the gains from trade that affects its national welfare.

One of the justifications for an import tariff is that it may enable a nation to extract larger gains from trade. A tariff-levying nation is similar to a monopsonist who restricts the level of purchases to reduce the price of inputs. By reducing the volume of imports with a tariff, a nation hopes to force down the prices it pays to foreign producers. This would improve the importing nation's terms of trade and result in larger gains from trade. But an importing nation would face a decline in its national welfare if the negative effects of a reduced volume of trade outweighed the positive effects of a favorable change in the terms of trade. This is like a monopolist who cuts back output too far and finds that price gains are more than offset by losses in volume.

Figure 5.4 illustrates the trade position of an importing nation. Line S_d represents the domestic supply schedule, and line D_d depicts the domestic demand schedule. *Autarky equilibrium* is achieved at point *E*. With free trade, the importing nation faces an overall supply schedule of S_{d+w}. This schedule shows the number of autos that both domestic and foreign producers together offer domestic consumers. The overall supply schedule is upward sloping rather than horizontal because the foreign supply price is not a fixed constant. The price depends on the quantity purchased by an importing country when it is a large buyer of the product. With free trade, our country achieves market equilibrium at point *F*. The price of autos falls to $8,000, domestic consumption rises to 110 units, and domestic production falls to 30 units. Auto imports totaling 80 units satisfy the excess domestic demand.

Suppose that the importing nation imposes a specific tariff of $1,000 on imported autos. By increasing the selling cost, the tariff results in a shift in the overall supply schedule from S_{d+w} to S_{d+w+t}. Market equilibrium moves from point *F* to point *G*, while product price rises from $8,000 to $8,800. The tariff-levying nation's consumer surplus falls by an amount equal to areas $a + b + c + d$. Area *a*, totaling $32,000, represents the *redistribution effect*; this amount is transferred from domestic consumers to domestic producers. Areas $d + b$ depict the tariff's *deadweight loss*—the deterioration in national welfare because of reduced

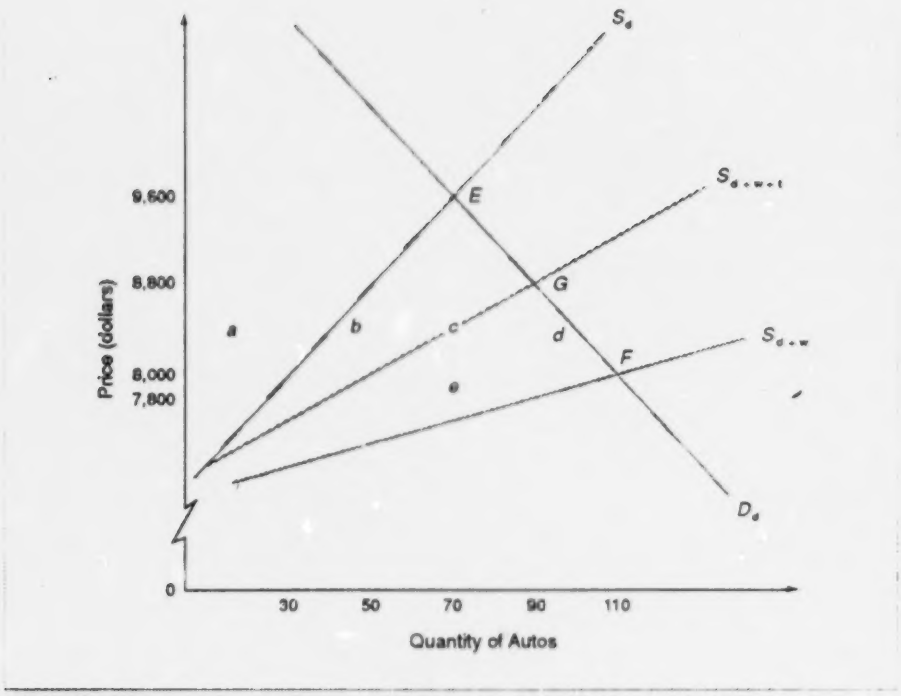


FIGURE 5.4 Tariff trade and welfare effects: large-nation model. For a large nation, a tariff on an imported product may be partially shifted to the domestic consumer via a higher product price and partially absorbed by the foreign exporter via a lower export price. The extent by which a tariff is absorbed by the foreign exporter constitutes a welfare gain for the home country. This gain offsets some (all) of the deadweight welfare losses due to the tariff's consumption effect and protective effect.

consumption (*consumption effect* = $8,000) and inefficient use of resources (*protective effect* = $8,000).

As in the small-nation example, a tariff's ***revenue effect*** is determined by multiplying the import tariff times the number of auto imports. This yields areas $c + e$, or $40,000. Notice that the tariff revenue accruing to the government now comes from foreign producers as well as domestic consumers. This is unlike the small-nation case, in which the supply schedule is horizontal and the tariff's burden falls entirely on domestic consumers. The tariff of $1,000 is added to the free trade import price of $8,000. Although the price in the protected market will exceed the foreign supply price by the amount of the duty, it will *not* exceed the free-trade foreign supply price by this amount. Compared with the free-trade foreign supply price of $8,000, the domestic consumers pay only an

additional $800 per imported auto. This is the *amount of the tariff shifted forward to the consumer*. At the same time, the foreign supply price of autos falls by $200. This means that foreign producers earn smaller revenues, $7,800, for each auto exported. Because foreign production takes place under increasing cost conditions, the reduction of imports from abroad triggers a decline in foreign production, and thus unit costs decline. The reduction in the foreign supply price, $200, represents that *portion of the tariff borne by the foreign producer*. The levying of the tariff raises the domestic price of the import by less than the amount of the duty as foreign producers lower their prices in an attempt to maintain sales in the tariff-levying nation. The importing nation finds that its terms of trade has improved if the price it pays foreign producers for auto imports decreases while the price it charges foreigners for its exports remains the same.

Thus the revenue effect of an import tariff in the large-nation case is made up of two components. The first is the amount of tariff revenue shifted from domestic consumers to the tariff-levying government; this is determined in Figure 5.4 by multiplying the level of imports (40 units) by the portion of the import tariff borne by domestic consumers ($800). The **domestic revenue effect** is depicted by area *c*, which equals $32,000. The second element is the tariff revenue extracted from foreign producers in the form of a lower supply price. Found by multiplying auto imports (40 units) by the portion of the tariff falling on foreign producers ($200), the **terms-of-trade effect** is shown as area *e*, which equals $8,000. Note that the terms-of-trade effect represents a redistribution of income from the foreign nation to the tariff-levying nation as a result of the new terms of trade. Together, the domestic revenue effect and the terms-of-trade effect equal the total revenue effect of the tariff.

A nation that is a major importer of a product is in a favorable trade situation. It may be able to use its tariff policy to improve the terms at which it trades, and hence its national welfare. But remember that the negative welfare effect of a tariff is the *deadweight loss* of consumer surplus that results from the protection and consumption effects. Referring to Figure 5.4, to determine if a tariff-levying nation can improve its national welfare, we must compare the overall impact of the deadweight loss (areas $b + d$) with the benefits of a more favorable terms of trade (area e). The conclusions regarding the welfare effects of a tariff are as follows:

1. If $e > (b + d)$, national welfare is increased.
2. If $e = (b + d)$, national welfare remains constant.
3. If $e < (b + d)$, national welfare is diminished.

In the preceding example, the domestic economy's welfare would have declined by an amount equal to $8,000. This is because the deadweight welfare losses, totaling $16,000, more than offset the $8,000 gain in welfare attributable to the terms-of-trade effect.

TARIFF WELFARE EFFECTS: EXAMPLES

The previous section analyzed the welfare effects of import tariffs from a theoretical perspective. Now let us turn to some examples of import tariffs and examine estimates of their costs and benefits to the nation.[2]

Citizens Band Radios

In 1978, President Carter extended temporary relief to U.S. producers of citizens band (CB) radio transceivers when he raised import tariffs from 6 percent to 21 percent. Over the following three years, the tariffs were phased down annually—from 21 to 18 to 15 percent—until final termination. The president's action was taken in response to the government's finding that imports of CB radios were seriously hurting the domestic industry.

Costs to the Consumer of Preserving a Production Worker's Job

Saving Jobs: Consumer Costs

Industry	Year in Which Protectionist Program Began	Annual Cost to Consumers	
		Total (millions of dollars)	Per Job Saved (dollars)
Specialty steel	1976	520	1,000,000
Nonrubber footwear	1977	700	55,000
Color TVs	1977	420	42,000
Bolts, nuts, screws	1979	110	550,000
Mushrooms	1980	35	117,000
Automobiles	1981	5,800	105,000
Textiles and apparel	1982	27,000	42,000
Carbon steel	1982	6,800	750,000
Motorcycles	1983	104	150,000

SOURCE: Gary Hufbauer et al., *Trade Protection in the United States: 31 Case Studies* (Washington, D.C.: Institute for International Economics, 1986), Tables 1.1 and 1.2.

Although import restrictions may provide benefits to domestic firms and workers, they are, in effect, a tax on the consumers of the protected products. Trade restraints result in an increase in the price and a decrease in the quantity of imported goods, which in turn increases the consumption of domestically produced goods as well as domestic prices.

A striking fact about protection to preserve jobs is that each job often ends up costing domestic consumers more than the worker's salary! As seen in the table, the consumer cost of protecting each job preserved in the auto industry in the United States is estimated to be $105,000 a year; this is far above the salary a production employee in that industry would receive. The fact that costs to consumers for each production job saved are so high underpins the argument that an alternative approach should be used to help workers: workers departing from an industry facing foreign competition should be liberally compensated (subsidized) for moving to new industries or taking early retirement.

Over the period 1972–1976, U.S. demand for CB radios increased twentyfold to a level valued at $940 million. However, imports as a share of the U.S. market were also rising, from 78 percent to 90 percent. By 1977, the sales of U.S. producers had fallen by almost 40 percent, and domestic employment in the manufacture of CB radios was down considerably. These circumstances led to the president's decision to provide additional protection for U.S. producers.

BEST COPY AVAILABLE

TABLE 5. 6 / Estimated Costs and Benefits of an Increased Tariff on CB Radios

Welfare Effect	*Cost/Benefit (in millions of dollars)*
Losses to domestic consumers	48.8
Deadweight losses	
Consumption	10.7
Production	1.5
Increase in tariff revenues	33.6
Gains to domestic producers	3.0

SOURCE: Morris E. Morkre and David G. Tarr, *Effects of Restrictions on U.S. Imports* (Washington, D.C.: Federal Trade Commission, 1980), p. 71.

The first-year welfare effects of the tariffs, as estimated by the Federal Trade Commission (FTC), are summarized in Table 5.6. An increase in the tariff from 6 percent to 21 percent would be expected to result in an $8 increase in the price of CB radios, from $54 to $62 per unit. Domestic consumption would fall by 1.53 million units, whereas domestic production would expand by 221,000 units. The total reduction in consumer surplus, resulting from the losses of those consumers who would have to pay a higher price plus the losses of those forced out of the market owing to the higher price, would amount to $48.8 million. Of this sum, tariff revenues would rise by $33.6 million, and profits to U.S. producers would increase by $3 million. The deadweight losses to the U.S. economy would stem from a $1.5-million loss due to production inefficiencies and a $10.7-million loss due to consumption inefficiencies. Approximately 587 jobs would be created for U.S. workers—but at a cost to the U.S. consumer of some $83,000 per job created.

Based on these estimates, the FTC concluded that the tariff would yield only modest benefits to the domestic industry. At the same time, the U.S. consumer and the economy at large would face considerable costs, and employment and sales of companies distributing imported CB radios would drop.

Motorcycles

There have been approximately 150 manufacturers of motorcycles in the United States since the first commercially produced motorcycle was manufactured in 1901. By the 1980s, there were one U.S.-owned firm, Harley-Davidson Motor Co., and two Japanese-owned firms, Kawasaki and Honda, operating in the United States. Harley specializes in the production of heavyweight motorcycles (1000 and 1300 cc).

In the early 1970s, Harley had 100 percent of the U.S. market for heavyweight motorcycles; by the early 1980s, its market share was less than 15 percent. During this decade, Harley continually lost ground to Japanese competitors such as Suzuki, Yamaha, Honda, and Kawasaki. Being used to tough competition, these Japanese firms were able to undercut Harley by $1,500 to $2,000 per motorcycle. Industry analysts maintained that Harley was plagued by inefficient production methods and poor management and that its per-unit costs were higher than those of the U.S. plants of Honda and Kawasaki.

During this period, Harley was the victim of a Honda–Yamaha struggle for domination of the motorcycle market. In the early 1980s, both Japanese motorcycle manufacturers flooded the U.S. market with a variety of new competitive models. Bloated Japanese inventories, estimated to be a year-and-a-half supply of new motorcycles stashed in U.S. dealerships and warehouses, led to heavy price cuts and intense product promotion.

By 1982, Harley was rapidly approaching bankruptcy because of a recession and reduced demand for motorcycles, operating inefficiencies, and a massive debt problem. Harley was surviving on borrowed money from Citicorp, and the bank was becoming increasingly apprehensive about extending additional loans.

Harley suffered a huge buildup in motorcycle inventories throughout 1982, which led to declines in profits, wages, and employment. In 1980, Harley had more than 4,000 employees; by the end of 1982, it had 2,200.

Harley turned to the U.S. government for tariff protection that would result in reductions in Japanese motorcycle inventories and increases in the price of Japanese motorcycles, so that Harley could become more competitive. With massive layoffs of their members, union officials actively supported Harley's plea for protectionism. In hopes of forestalling possible trade restrictions, the Japanese motorcycle producers offered technical assistance and loan guarantees to Harley, who turned down the offers. Apparently, Harley felt that it could convince the government that import restrictions were justified.

In September of 1982, Harley petitioned the U.S. government for protectionist relief from the importation of heavyweight motorcycles. The government concluded that rising motorcycle imports from Japan were a substantial cause of a threat of serious injury to Harley and that temporary protectionism was justified to permit Harley to recover from its injuries and provide it time to complete a comprehensive program to fully compete with the Japanese.

On April 1, 1983, the U.S. government implemented a five-year tariff program for heavyweight (700-cc engines and larger) motorcycles. The import tariff was raised from 4.4 percent to 49.4 percent during the first year; during the second year, the tariff was reduced to 39.4 percent, followed by cuts of 15 percent, 5 percent, and 5 percent in the next three years. After the fifth year, the tariff was to revert back to 4.4 percent. The tariff hikes did not apply to motorcycle imports from Italy, Germany, and the United Kingdom, which accounted for less than 20 percent of U.S. imports of heavyweight motorcycles in 1982. The five-year tariff program was intended to allow Harley sufficient time to eliminate its excess inventories and to benefit from improved economies of scale obtained from increased sales and production.

The U.S. International Trade Commission (ITC) estimated the economic effects of the increased tariff on imported heavyweight motorcycles. During the first year of the tariff, motorcycle prices would increase 10 percent; prices would rise more than 12 percent during the second year as motorcycle inventories were reduced. The ITC felt that Harley would be restrained from raising prices to any significant degree by continued competition from motorcycles produced domestically by Honda and Kawasaki, as well as from imports. The ITC also estimated that during the first two years of the tariff program, overall motorcycle sales would fall by 20,000 units; however, sales of Harley-Davidson motorcycles would rise by more than 8,000 units. This would allow Harley to keep its plants operating.

But the substantial tariff looked much better on paper than it worked out in reality. Stung, Japanese motorcycle manufacturers reacted promptly to circumvent the tariff policy. They quickly downsized their 750-cc motorcycle engines to 699 cc, thus evading the tariff that applied to motorcycle imports having engines of 700 cc or more. The press dubbed these downsized models as "tariff busters." The downsized engine wiped out approximately half of the tariff's value to Harley.

Moreover, Kawasaki and Honda quickly increased production of heavyweight motorcycles in their U.S. plants. That left only Suzuki and Yamaha motorcycles, with engines over 1000 cc, subject to the tariff. And these manufacturers were permitted to ship 7,000–10,000 of these heavyweight motorcycles to the United States before they had to start paying the extra import duty.

Although the outcome of the tariff was disappointing to Harley, one of its important objectives was accomplished—an end to the escalation of U.S. motorcycle inventories by Japanese firms and liquidation of the large stock of motorcycles already in dealers' showrooms and warehouses. This liquidation, however, occurred at discounted prices, which put further competitive pressure on Harley.

As the 1980s continued, Harley's economic performance improved. By 1987, Harley enjoyed record profits of almost $18 million. It also enjoyed a 40-percent market share in the super-heavyweight motorcycle class, 11 percentage points ahead of its closest rival, Honda, and 17 points above its 1983 low of 23 percent. In March 1987, Harley announced that it no longer needed special tariffs to compete with the Japanese motorcycle firms. Harley indicated that, given temporary relief from predatory import practices, it had become competitive in world markets.[3]

EVALUATION OF TARIFF WELFARE EFFECTS

In earlier sections, we saw that a tariff affects a nation's welfare in two opposing ways: a terms-of-trade effect and a volume-of-trade effect.

Imposition of a tariff may result in an improvement in a nation's terms of trade (the rate at which products are exchanged in international trade). Because a tariff makes imports more expensive for, say, U.S. consumers, the number of imports demanded tends to decline. This makes it more difficult for foreigners to generate the revenues necessary to finance purchases from the United States. Foreigners may reduce their export prices in an attempt to enhance their capacity to finance purchases. So the tariff improves the U.S. terms of trade by lowering the prices the nation must pay for its imports. However, a reduced volume of imports due to the tariff results in a negative welfare effect for the United States in the form of a deadweight loss in consumer surplus. U.S. welfare thus improves if the favorable terms-of-trade effect outweighs the adverse trade-volume effect.

By modifying the relative prices at which nations exchange goods and services, a tariff results in a redistribution of the gains from trade among nations. A favorable terms of trade, yielding a larger share of the gains from trade for one nation, implies a smaller share for the other nation; overall world welfare does not change because of the terms-of-trade effect. However, tariffs do produce a negative welfare effect: a reduction in the volume of world trade. For the world as a whole, tariffs thus reduce the level of welfare.

A single nation that is dissatisfied with the distribution of the world gains from trade may consider whether it should initiate a tariff on imports. But in an interdependent world, the nation realizes that this act would not be welcomed by its trading partners. The possibility of foreign tariff retaliation may be a sufficient deterrent for any nation considering whether to impose higher tariffs.

A classic case of a tariff-induced trade war was the implementation of the Smoot–Hawley tariff by the U.S. government in 1930. The tariff was initially intended to provide relief to U.S. farmers. However, senators and members of Congress from industrial states used the technique of vote trading to obtain increased tariffs on manufactured goods. The result was a policy that increased tariffs on more than 1,000 products, with an average nominal duty on protected goods of 53 percent! Viewing the Smoot–Hawley tariff as an attempt to force unemployment on its workers, 12 nations promptly increased their duties against the United States. U.S. farm exports fell to one-third of their former level, and between 1930 and 1933, total U.S. exports fell by almost 60 percent. Although the Great Depression accounted for much of that decline, the adverse psychological impact of the Smoot–Hawley tariff on business activity cannot be ignored.

HOW A TARIFF BURDENS EXPORTERS

The benefits and costs of protecting domestic producers from foreign competition, as discussed earlier in this chapter, are based on the direct effects of an import tariff. Import-competing businesses and workers can benefit from tariffs through increases in output, profits,

Effects of Eliminating Import Tariffs

Eliminating Import Tariffs: Gains and Losses

Import-Competing Industry	*Millions of Dollars*			
	Consumer Gain	*Producer Loss*	*Domestic Tax Loss*	*Job Loss (in thousands)*
Rubber footwear	$272.2	$44.1	$28.5	2.4
Women's footwear	325.1	54.6	38.0	3.5
Ceramic tile	90.0	10.0	11.6	0.4
Luggage	186.3	36.4	21.0	1.8
Women's handbags	134.4	25.7	15.5	1.6
Glassware	185.8	77.2	14.8	2.5
Resins	93.1	45.1	5.8	1.1
Bicycles	38.1	10.0	4.0	0.6
Ball bearings	50.3	3.9	6.9	0.1
Canned tuna	61.3	35.0	3.2	0.8
Cedar shingles	25.3	11.5	6.1	0.1

SOURCE: U.S. International Trade Commission, *The Economic Effects of Significant U.S. Import Restraints, Phase 1: Manufacturing* (Washington, D.C.: Government Printing Office, October 1989), Tables ES-1 and ES-2.

What would be the effects if the United States unilaterally removed tariffs on imported products? On the positive side, tariff elimination lowers the price of the affected imports and may lower the price of the competing U.S. good, resulting in economic gains to the U.S. consumer. On the negative side, the lower price to import-competing producers, as a result of eliminating the tariff, results in profit reductions; workers become displaced from the domestic industry that loses protection; and the U.S. government loses tax revenue as the result of eliminating the tariff. The table gives estimates of the short-run effects that would occur in the first year after tariff removal.

jobs, and compensation. A tariff imposes costs on domestic consumers in the form of higher prices of protected products and reductions in consumer surplus. There is also a net welfare loss for the economy because not all of the loss of consumer surplus is transferred as gains to domestic producers and the government (the protective effect and consumption effect).

A tariff carries additional burdens. In protecting import-competing producers, a tariff leads indirectly to a reduction in domestic exports. *The net result of protectionism is to move the economy toward greater self-sufficiency, with lower imports and exports.* For domestic workers, the protection of jobs in import-competing industries comes at the

BEST COPY AVAILABLE

expense of jobs in other sectors of the economy, including exports. Although a tariff is intended to help domestic producers, the economy-wide implications of a tariff are adverse for the export sector. The welfare losses due to restrictions in output and employment in the economy's export industry may offset the welfare gains enjoyed by import-competing producers.

Because a tariff is a tax on imports, the burden of a tariff falls initially on importers, who must pay duties to the domestic government. However, importers generally try to shift increased costs to buyers through price increases. There are at least three ways in which the resulting higher prices of imports injure domestic exporters.

First, exporters often purchase imported inputs subject to tariffs that increase the *cost of inputs*. Because exporters tend to sell in competitive markets where they have little ability to dictate the prices they receive, they generally cannot pass on a tariff-induced increase in cost to their buyers. Higher export costs thus lead to higher prices and reduced overseas sales.

Second, by increasing the price of imports, tariffs raise the *cost of living*. Workers thus have the incentive to demand correspondingly higher wages, resulting in higher production costs. Tariffs lead to expanding output for import-competing companies that in turn bid for workers, causing money wages to rise. As these higher wages pass through the economy, export industries ultimately face higher wages and production costs, which lessen their competitive positions in international markets.

Finally, import tariffs have *international repercussions* that lead to reductions in domestic exports. Tariffs cause the quantity of imports to decrease, which in turn decreases other nations' export revenues and ability to import. The decline in foreign export revenues results in a smaller demand for a nation's exports and leads to falling output and employment in its export industries.

To what extent do tariffs on imports impose higher costs on domestic exporters?

TABLE 5.7 / The Proportion of an Import Tariff Borne by Exporters

Country	*Period*	*Percentage of Import Tariff Borne by Domestic Exporters**
Chile	1959–1970	55
Uruguay	1966–1979	53
Argentina	1935–1979	57
El Salvador	1962–1977	70
Australia	1950–1980	70
Brazil	1950–1978	70
Colombia	1970–1978	95
Mean		66

* Indicates the share of any import protection that, because of relative prices, becomes an implicit tax on exports.

SOURCE: Kenneth W. Clements and Larry A. Sjaastad, *How Protection Taxes Exporters* (London: Trade Policy Research Centre, 1985), pp. 25–27.

Estimates have been made of the fraction of an import tariff that is transferred to domestic exporters in the form of higher costs. The results for seven countries are summarized in Table 5.7. These estimates suggest that at least one-half of a nominal tariff on imports is borne by the domestic export industries of the seven countries studied! Government officials cannot independently choose to protect import-competing producers without imposing significant cost burdens on domestic exporters.

If domestic export companies are damaged by import tariffs, why don't they protest such policies more vigorously? One problem is that tariff-induced increases in costs for export companies are subtle and invisible. Many exporters may not be aware of their existence. Also, the tariff-induced cost increases may be of such

magnitude that some potential export companies are incapable of developing and have no tangible basis for political resistance.

TARIFF QUOTA: A TWO-TIER TARIFF

Another restriction used to insulate a domestic industry from foreign competition is the **tariff quota.** Although not widely used as a trade restriction, the tariff quota has been levied by the U.S. government to protect producers of such commodities as milk, cattle, fish, brooms, tobacco products, and coconut oil.

As its name suggests, a tariff quota displays both tariff-like and quota-like characteristics. This device allows a specified number of goods to be imported at one tariff rate (the *within-quota rate*), whereas any imports above this level face a higher tariff rate (the *over-quota rate*). A tariff quota can thus be thought of as a *two-tier tariff*. For example, during the early 1970s, the U.S. tariff quota on fluid milk was set at 3 million gallons a year. Milk imports within this limit faced a duty of 2 cents per gallon, but a duty of 6.5 cents per gallon was applied to any imports over this limit.

The tariff quota is generally viewed as a compromise between the interests of the consumer, who desires low-cost imports, and those of the domestic producer, who desires protectionism. The tariff quota attempts to minimize the adverse costs for the consumer through a modest within-quota rate, while still shielding home producers from severe import competition by means of a stiffer over-quota rate.

Figure 5.5 illustrates the welfare effects of a hypothetical tariff quota on steel. Assume that the U.S. demand and supply schedules for steel are given by $D_{U.S.}$ and $S_{U.S.}$, and the equilibrium (autarky) price of steel is $540 per ton. Assuming free trade, suppose the United States faces a constant world price of steel equal to $400 per ton. At the free-trade price, U.S. production equals 5 tons, U.S. consumption equals 40 tons, and imports equal 35 tons.

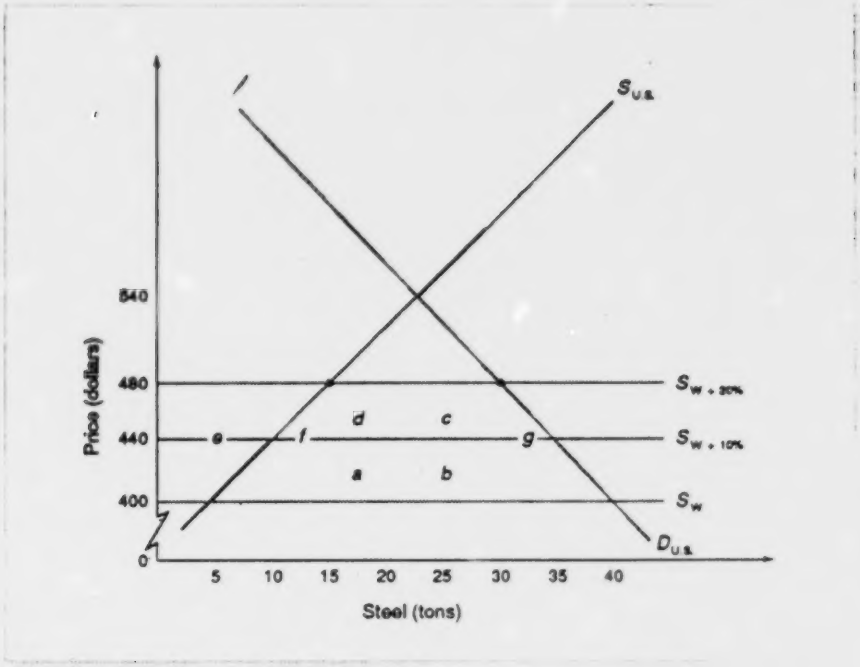
To protect its producers from foreign competition, suppose the United States enacts a tariff quota of 5 tons. Imports within this limit face a 10-percent tariff, but a 20-percent tariff is applied to imports in excess of the limit.

Because the United States is initially importing an amount exceeding the limit as defined by the tariff quota, both the within-quota rate and the over-quota rate would apply. This two-tier tariff results in a rise in the price of steel sold in the United States from $400 to $480 per ton. Domestic production increases to 15 tons, domestic consumption falls to 30 tons, and imports fall to 15 tons. Increased sales would permit the profits of U.S. steel producers to rise by an amount equal to area *e*. The deadweight losses to the U.S. economy, in terms of production and consumption inefficiencies, would equal areas *f* and *g*, respectively.

The interesting feature of the tariff quota is the revenue it generates. Some of it accrues to the domestic government as tariff revenue, but the remainder is captured by business as windfall profits.

In the preceding example, after enactment of the tariff quota, 15 tons of steel are imported. The U.S. government collects area *a*, found by multiplying the within-quota duty of $40 times 5 tons. Area $b + c$ also accrues to the government, ascertained by multiplying the remaining 10 tons of imported steel times the over-quota duty of $80.

Area *d* in the figure represents windfall profits—a gain to business resulting from sudden or unexpected government policy. Under the tariff quota, the domestic price of the first 5 tons of steel imported is $440, reflecting the foreign supply price of $400 plus the import duty of $40. Suppose U.S. import companies are able to obtain foreign steel at $440. By reselling the 5 tons to U.S. consumers at $480 per ton, the price of over-quota steel, U.S. importers would capture area *d* as windfall profits. But this opportunity will not last long, because foreign steelmakers will want to capture the windfall gain. To the extent that they can restrict steel exports to the



F I G U R E 5. 5 Tariff quota trade and welfare effects. A tariff quota is a two-tier tariff levied on imports. Its imposition leads to higher product prices and a decrease in consumer surplus for domestic buyers. Of the tariff quota's revenue effect, a portion accrues to the domestic government, while the remainder is captured by domestic importers or foreign exporters as windfall profits.

United States in a monopolistic fashion, foreign producers could force up the price of steel and expropriate profits from U.S. importers. Foreign producers conceivably could capture the entire area *d* by raising their supply price to $480 per ton. The portion of the windfall profits captured by foreign steelmakers represents an overall welfare loss to the U.S. economy.

ARGUMENTS FOR TRADE RESTRICTIONS

The **free-trade argument** is, in principle, persuasive. It states that if each nation produces what it does best and permits trade, over the long run all will enjoy lower prices and higher levels of output, income, and consumption than could be achieved in isolation. In a dynamic world, comparative advantage is constantly changing owing to shifts in technologies, input productivities, and wages, as well as tastes and preferences. A free market compels adjustment to take place. Either the efficiency of an industry must improve, or else resources will flow from low-productivity uses to those with high productivity. Tariffs and other trade barriers are viewed as tools that prevent the economy from undergoing adjustment, resulting in economic stagnation.

Do Trade Restraints Bolster Overall Employment?

Effects of Trade Restraints

Industry	*Change in Employment*	
	Percentage	*Absolute*
Job Gainers		
Primary metals (steel)	3.61	31,003
Mining	0.34	3,280
Utilities	0.14	1,244
Finance and insurance	0.11	6,108
Printing and publishing	0.09	1,234
Wholesale and retail trade	0.08	12,720
Services	0.07	16,177
Other		5,679
		77,455
Job Losers		
Motor vehicles and equipment	1.31	11,311
Furniture and fixtures	0.70	3,417
Machinery	0.67	16,914
Transportation equipment	0.63	6,497
Construction	0.59	15,763
Other		23,538
		74,440

SOURCE: Linda C. Hunter, "U.S. Trade Protection: Effects on the Industrial and Regional Composition of Employment," Federal Reserve Bank of Dallas, *Economic Review* (January 1990), pp. 1–13.

(continued)

Although the free-trade argument tends to dominate in the classroom, virtually all nations have imposed restrictions on the international flow of goods, services, and capital. Often proponents of protectionism say "Free trade is fine in theory, but it does not apply in the real world." Modern trade theory assumes perfectly competitive markets whose characteristics do not reflect real-world market conditions. Moreover, even though protectionists may concede that economic losses occur with tariffs and other restrictions, they often argue that noneconomic benefits such as national security more than offset the economic losses. In seeking protection from imports, domestic industries and labor unions seek to better their economic welfare. Over the years, a number of arguments have been advanced to pressure the president and Congress to enact restrictive measures.

Do Trade Restraints Bolster Overall Employment?

(continued)

The dramatic increase in the U.S. trade deficit in the 1980s fueled protectionist sentiment. Proponents of trade restrictions contended that U.S. workers were losing jobs to foreigners in key industries (such as electronics) and that trade barriers were necessary to bolster overall employment.

Trade restraints raise employment in the protected industry (such as steel) by increasing the price (or reducing the supply) of competing import goods. Industries that are primary suppliers of inputs to the protected industry also gain jobs. However, industries that purchase the protected product (such as motor vehicle manufacturers) face higher costs. These costs are then passed on to the consumer through higher prices, resulting in decreased sales. Thus, employment falls in these related industries.

Economists at the Federal Reserve Bank of Dallas have examined the effects of trade restrictions on the composition of employment in several U.S. industries: textiles and apparel, steel, and automobiles. They conclude that in an economy near full employment, trade protection will have little or no effect on the level of employment in the long run. Trade restraints tend to provide job gains for only a few industries, while they result in job losses spread across many industries.

The table illustrates the effects of trade restraints for the U.S. steel industry in 1984. The restraints provided an almost 4-percent increase in the number of U.S. steelworker jobs; the mining industry, a primary supplier to the steel industry, also experienced significant employment increases. The restraints, however, resulted in job losses for steel-using industries, including motor vehicles and equipment, furniture and fixtures, transportation equipment, and fabricated metal products.

Comparing the job gainers and losers, the trade restraints provided negligible employment gains for the U.S. economy. The economists at the Federal Reserve Bank of Dallas drew similar conclusions concerning the employment effects of trade restrictions in the textiles and apparel industry and the automobile industry.

Job Protection

The issue of jobs has been a dominant factor in motivating government officials to levy trade restrictions on imported goods. During periods of economic recession, workers are especially eager to point out that cheap foreign goods undercut domestic production, resulting in a loss of domestic jobs to foreign labor. Alleged job losses to foreign competition historically have been a major force behind the desire of most U.S. labor leaders to reject free-trade policies.

This view, however, has a serious omission: it fails to acknowledge the dual nature of international trade. Changes in a nation's imports of goods and services are closely related to changes in its exports. Nations export goods because they desire to import products from other nations. When the United States imports goods from abroad, foreigners

gain purchasing power that will eventually be spent on U.S. goods, services, or financial assets. U.S. export industries then enjoy gains in sales and employment, whereas the opposite occurs in U.S. import-competing industries. Rather than promoting overall unemployment, imports tend to generate job opportunities in some industries as part of the process by which they decrease employment in other industries. However, the job gains due to open trade policies tend to be less visible to the public than the readily observable job losses stemming from foreign competition. The more conspicuous losses have led many U.S. business and labor leaders to combine forces in their opposition to free trade.

Protection against Cheap Foreign Labor

One of the most common arguments used to justify the protectionist umbrella of trade restrictions is that tariffs are needed to defend domestic jobs against cheap foreign labor. As indicated in Table 5.8, production workers in the United States have been paid much higher wages, in terms of the U.S. dollar, than workers in countries such as Mexico and South Korea. So it could be argued that low wages abroad make it difficult for U.S. producers to compete with producers using cheap foreign labor and that unless U.S. producers are protected from imports, domestic output and employment levels will decrease. Although this viewpoint may have widespread appeal, it fails to recognize the links among efficiency, wages, and production costs.

Even if domestic wages are higher than those abroad, if domestic labor is more productive than foreign labor, domestic labor costs may still be competitive. Total labor costs reflect not only the wage rate but the output per labor hour. If the productive superiority of domestic labor more than offsets the higher domestic wage rate, the home nation's labor costs will actually be less than they are abroad.

TABLE 5. 8 / Hourly Compensation Costs in U.S. Dollars for Production Workers in Manufacturing, 1992

Country	*Hourly Compensation (dollars/hour)*
United States	$16.17
Canada	17.02
Mexico	2.35
Australia	12.94
Korea	4.93
Taiwan	5.19
Austria	19.65
Finland	18.69
Germany	25.94
France	16.88
Norway	23.20
Sweden	24.23
Switzerland	23.26
United Kingdom	14.69

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *International Comparisons of Hourly Compensation Costs for Production Workers in Manufacturing, 1992* (Washington, D.C.: Government Printing Office), April 1993.

Another limitation of the cheap-foreign-labor argument is that low-wage nations tend to have a competitive advantage only in the production of goods requiring much labor and little of the other factor inputs. This means that the wage bill is the largest component of the total costs of production, which include payments to all factor inputs. It is true that a high-wage nation may have a relative cost disadvantage compared with its low-wage trading partner in the production of labor-intensive commodities. But this does not mean that foreign producers can undersell the home country across the board in all lines of production, causing the overall domestic standard of living to

decline. Foreign nations should use the revenues from their export sales to purchase the products in which the home country has a competitive advantage—that is, products requiring a large share of the factors of production that are abundant domestically.

Contemporary international trade theory suggests that as economies become integrated through trade, there is a tendency for resource payments to become equalized in different nations, given competitive markets. A nation with expensive labor will tend to import products embodying large amounts of labor. As imports rise and domestic output falls, the resulting decrease in demand for domestic labor will cause domestic wages to fall to the foreign level.

In automobile manufacturing, for example, there has been sufficient international competition to warrant such a process. This was seen in the 1980s, when high unemployment in the U.S. auto industry permitted General Motors and Ford to scale down the compensation levels of their employees as a means of offsetting their cost disadvantages against the Japanese. The adverse implications of resource price equalization for the wages of U.S. autoworkers could explain the United Auto Workers' (UAW) support for protectionism. By shielding U.S. wage levels from market pressures created by foreign competition, protectionism would result in the U.S. government's validating the high wages and benefits of UAW members. International price equity is thus negated by trade restrictions.

Fairness in Trade: A Level Playing Field

Fairness in trade is another reason given for protectionism. Business firms and workers often argue that foreign governments play by a different set of rules than the home government, giving foreign firms unfair competitive advantages. Domestic producers contend that import restrictions should be enacted to offset these foreign advantages, thus creating a level playing field on which all producers can compete on equal terms.

U.S. companies often allege that foreign firms are not subject to the same government regulations regarding pollution control and worker safety as U.S. companies; this is especially true in many developing nations (such as Mexico and South Korea), where pollution laws and enforcement have been lax. Moreover, foreign firms may not pay as high corporate taxes or have to comply with employment regulations such as affirmative action, minimum wage, and overtime pay. Also, foreign governments may erect high trade barriers that effectively close their markets to imports, or they may subsidize their producers so as to enhance their competitiveness in world markets.

These fair-trade arguments are often voiced by organized lobbies that are losing sales to foreign competitors. They may sound appealing to voters, because they are couched in terms of fair play and equal treatment. However, there are several arguments against levying restrictions on imports from nations that have high trade restrictions or place lower regulatory burdens on their producers.

First, there is a benefit to the domestic economy from trade even if foreign nations impose trade restrictions. Although foreign restrictions that lessen our exports may decrease our welfare, retaliating by levying our own import barriers (which protect inefficient domestic producers) decreases our welfare even more. Second, the argument does not recognize the potential impact on global trade. If each nation were to increase trade restrictions whenever foreign restrictions were higher than domestic restrictions, there would occur a worldwide escalation in restrictions; this would lead to a lower volume of trade, falling production and employment levels, and a decline in welfare. There may be a case for threatening to levy trade restrictions unless foreign nations reduce their restrictions; but if negotiations fail and domestic restrictions are employed, the result is

undesirable. Foreign trade practices are seldom an adequate justification for domestic trade restrictions.

Maintenance of the Domestic Standard of Living

Advocates of trade barriers often contend that tariffs are useful in maintaining a high level of income and employment for the home nation. It is argued that by reducing the level of imports, tariffs encourage home spending, which stimulates domestic economic activity. As a result, the home nation's level of employment and income is enhanced.

Although this argument appears appealing on the surface, it merits several qualifications. It is apparent that all nations together cannot levy tariffs to bolster domestic living standards. This is because tariffs result in a redistribution of the gains from trade among nations. To the degree that one nation imposes a tariff that improves its income and employment, it occurs at the expense of its trading partner's living standard. Nations adversely affected by trade barriers are likely to impose retaliatory tariffs, resulting in a lower level of welfare for all nations. It is little wonder that tariff restrictions designed to enhance a nation's standard of living at the expense of its trading partner are referred to as *beggar-thy-neighbor* policies.

Equalization of Production Costs

Proponents of this argument, sometimes called the *scientific tariff*, seek to eliminate what they consider to be unfair competition from abroad. Owing to such factors as lower wage costs, tax concessions, or government subsidies, foreign sellers may enjoy cost advantages over domestic firms. To offset any such advantage, tariffs equivalent to the cost differential should be imposed. Such provisions were actually part of the U.S. Tariff Acts of 1922 and 1930.

In practice, the scientific tariff suffers from a number of problems. Because within a given industry costs differ from business to business, how can costs actually be compared? Suppose that all U.S. steelmakers were extended protection from all foreign steelmakers. This would require the costs of the most efficient foreign producer to be set equal to the highest costs of the least efficient U.S. company. Given today's cost conditions, prices would certainly rise in the United States. This would benefit the more efficient U.S. companies, which would enjoy economic profits, but the U.S. consumer would be subsidizing inefficient production. [illegible] the scientific tariff approximates a prohibitive tariff, it completely contradicts the notion of comparative advantage and wipes out the basis for trade and gains from trade.

Infant-Industry Argument

One of the more commonly accepted cases for tariff protection is the infant-industry argument. This argument does not deny the validity of the case for free trade. However, it contends that for free trade to be meaningful, trading nations should temporarily shield their newly developing industries from foreign competition. Otherwise, mature foreign businesses, which are at the time more efficient, can drive the young domestic businesses out of the market. Only after the young companies have had time to become efficient producers should the tariff barriers be lifted and free trade take place.

Figure 5.6 illustrates the logic of the infant-industry argument. During its infant stage, shown as time period t_0–t_1, a new industry will not likely to be able to compete against mature foreign industries. Not only are its operations too small to realize economies of scale, but its production methods may be untested and need further improvements. Only after these long-run adjustments have been made can the young industry prosper and become an efficient producer. This occurs during time period t_1–t_2 in

BEST COPY AVAILABLE

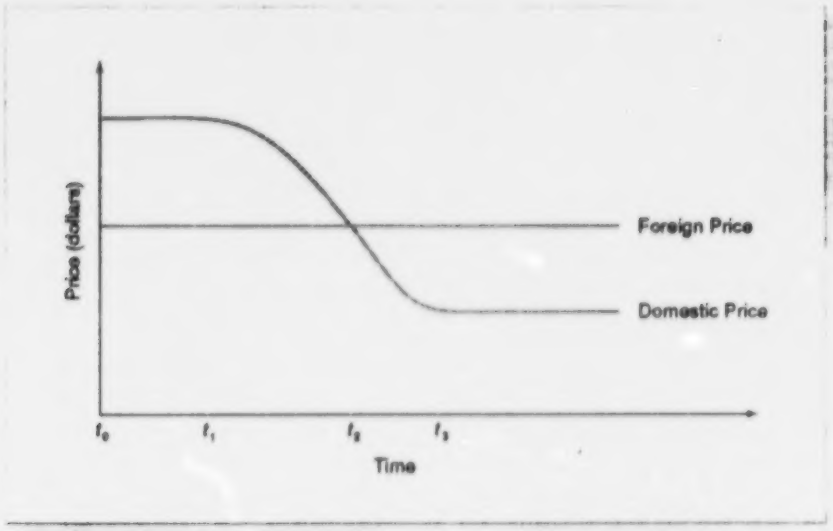


FIGURE 5.6 Infant-industry argument for tariff protection. According to the infant-industry argument, a new, emerging industry may not be able to compete against mature foreign producers. Temporary tariff protection granted to the infant industry will allow it to prosper and become competitive in the world market. When the infant industry matures and achieves international competitiveness, the tariff will be removed.

Figure 5.6. Eventually, the infant industry will mature and achieve its competitive advantage.

Although there is some truth in the infant-industry argument, it must be qualified in several respects. First, once a protective tariff is imposed, it is very difficult to remove, even after industrial maturity has been achieved. Special-interest groups can often convince policymakers that further protection is justified. Second, it is very difficult to determine which industries will be capable of realizing comparative-advantage potential and thus merit protection. Third, the infant-industry argument generally is not valid for the mature, industrialized nations such as the United States, Germany, and Japan. Finally, there may be other ways of insulating a developing industry from cutthroat competition. Rather than adopt a protective tariff, the government could grant a subsidy to the industry. A subsidy has the advantage of not distorting domestic consumption and relative prices; its drawback is that instead of generating revenue, as an import tariff does, a subsidy spends revenue.

Noneconomic Arguments

Noneconomic considerations also enter into the arguments for protectionism. One such consideration is *national security*. The national-security argument contends that a country may be put in jeopardy in the event of an international crisis or war if it is heavily dependent on foreign suppliers. Even though domestic producers are not as efficient, tariff protection

should be granted to ensure their continued existence. A good application of this argument involves the major oil-importing nations, which saw several Arab nations impose oil boycotts on the West to win support for the Arab position against Israel during the 1973 Middle East conflict. The problem, however, is stipulating what constitutes an essential industry. If the term is defined broadly, many industries may be able to win protection from import competition, and the argument loses its meaning.

Another noneconomic argument is based on *cultural* and *sociological* considerations. New England may desire to preserve small-scale fishing; West Virginia may argue for tariffs on handblown glassware, on the grounds that these skills enrich the fabric of life; certain products such as narcotics may be considered socially undesirable, and restrictions or prohibitions placed on their importation. These arguments constitute legitimate reasons and cannot be ignored. All the economist can do is point out the economic consequences and costs of protection and identify alternative ways of accomplishing the same objective.

It is important to note that most of the arguments justifying tariffs are based on the assumption that the national welfare, as well as the individual's welfare, will be enhanced. The strategic importance of tariffs for the welfare of import-competing producers is one of the main reasons that reciprocal tariff liberalization has been so gradual. It is no wonder that import-competing producers make such strong and politically effective arguments that increased foreign competition will undermine the welfare of the nation as a whole, as well as their own. Although a liberalization of tariff barriers may be detrimental to a particular group, one must be careful to differentiate between the individual's welfare and the national welfare. If tariff reductions result in greater welfare gains from trade and if the adversely affected party can be compensated for the loss it has faced, the overall national welfare will increase. However, proving that the gains more than offset the losses in practice is very difficult.

THE POLITICAL ECONOMY OF PROTECTIONISM

Recent history indicates that increasing dependence on international trade yields uneven impacts across domestic sectors. The United States has enjoyed comparative advantages in such products as agricultural commodities, industrial machinery, chemicals, and scientific instruments. However, some of its industries have lost comparative advantages and suffered from international trade—among them, apparel and textiles, motor vehicles, electronic goods, basic iron and steel, and footwear. Formulating international trade policy in this environment is difficult. Free trade can yield substantial benefits for the overall economy through increased productivity and lower prices, but specific groups may benefit if government provides them some relief from import competition. Government officials must consider these opposing interests when setting the course for international trade policy.

Considerable attention has been devoted to what motivates government officials when formulating trade policy. As voters, we do not have the opportunity to go to the polls and vote for a trade bill. Instead, formation of trade policy rests in the hands of elected officials and their appointees. It is generally assumed that elected officials form policies to maximize votes, and thus remain in office. The result is a bias in the political system that favors protectionism.

The protection-biased sector of the economy generally consists of import-competing companies, the labor unions representing workers in that industry, and the suppliers to the companies in the industry. Seekers of protectionism are often established firms in an aging industry that have lost their comparative advantage. High costs may be due to lack of

modern technology, inefficient management procedures, outmoded work rules, or high payments to domestic workers. The free-trade-biased sector generally comprises exporting companies, their workers, and their suppliers. It also consists of consumers, including wholesalers or retail merchants, who import goods.

Government officials understand that they will likely lose the political support of, say, the UAW if they vote against increases in tariffs on auto imports. They also understand that their vote on this trade issue will not be the key factor underlying the political support provided by many other citizens. This support can be retained by appealing to them on other issues while voting to increase the tariff on auto imports to maintain UAW support.

U.S. protection policy is thus dominated by special-interest groups that represent producers. Consumers generally are not organized, and their losses due to protectionism are widely dispersed, whereas the gains from protection are concentrated among well-organized producers and labor unions in the affected sectors. Those harmed by a protectionist policy absorb individually a small and difficult-to-identify cost. Many consumers, though they will pay a higher price for the protected product, will not associate the higher price with the protectionist policy and thus are unlikely to be concerned about trade policy. Special-interest groups, however, are highly concerned about protecting their industries against import competition. They provide support for government officials who share their views and lobby against the election of those who do not. Clearly, government officials seeking reelection will be sensitive to the special-interest groups representing producers.

The political bias favoring domestic producers is seen in the tariff escalation effect, discussed earlier in this chapter. Recall that the tariff structures of industrial nations often result in lower import tariffs on intermediate goods and higher tariffs on finished goods. For example, U.S. imports of cotton yarn have traditionally faced low tariffs, while higher tariffs have been applied to cotton fabric imports. The higher tariff on cotton fabrics appears to be the result of ineffective lobbying efforts of diffused consumers, who lose to organized U.S. fabric producers lobbying for protectionism. But for cotton yarn, the protectionist outcome is less clear. Purchasers of cotton yarn are U.S. manufacturers who want low tariffs on imported inputs. These companies form trade associations and can pressure Congress for low tariffs as effectively as U.S. cotton suppliers who lobby for high tariffs. Protection applied to imported intermediate goods, such as cotton yarn, is thus less likely.

Not only does the interest of the domestic producer tend to outweigh that of the domestic consumer in trade policy deliberations, but *import-competing producers tend to exert stronger influence on legislators than do export producers.* A problem faced by export producers is that their gains from international trade are often in addition to their prosperity in the domestic market; producers that are efficient enough to sell overseas are often safe from foreign competition in the domestic market. Most deliberations on trade policy emphasize protecting imports, and the indirect damage done by import barriers to export producers tends to be spread over many export industries. But import-competing producers can gather evidence of immediate damage caused by foreign competition, including falling sales, profits, and employment levels. Legislators tend to be influenced by the more clearly identified arguments of the import-competing industry and see that a greater number of votes are at stake among their constituents than among the constituents of the export producers.

The political economy of import protection can be analyzed in terms of supply and demand. Protectionism is supplied by the domestic government, while domestic companies and workers are the source of demand. The supply of protection depends on (1) the costs to society, (2) the political importance of the

import-competing industry, (3) adjustment costs, and (4) public sympathy.

Enlightened government officials realize that although protectionism provides benefits to the domestic industry, *costs* are inflicted on society. These costs include the losses of consumer surplus because of higher prices and the resulting deadweight losses as import volume is reduced, lost economies of scale as opportunities for further trade are foregone, and the loss of incentive for technological development caused by import competition. The higher the costs of protection to society, the less likely it is that government officials will shield an industry from import competition.

The supply of protectionism is also influenced by the *political importance* of the import-competing industry. An industry that enjoys strong representation in the legislature is in a favorable position to win import protection. It is more difficult for politicians to disagree with 1 million autoworkers than with 20,000 copper workers. The national-security argument for protection is a variant on the consideration of the political importance of the industry. Thus, for example, the U.S. coal and oil industries were successful in obtaining a national-security clause in U.S. trade law permitting protection if imports threaten to impair domestic security.

The supply of protection also tends to increase when domestic businesses and workers face large costs of adjusting to rising import competition (for example, unemployment or wage concessions). This protection is seen as a method of delaying the full burden of *adjustment*.

Finally, as *public sympathy* for a group of domestic businesses or workers increases (for example, if workers are paid low wages and have few alternative work skills), a greater amount of protection against foreign-produced goods tends to be supplied.

On the demand side, factors that underlie the domestic industry's demand for protectionism are (1) comparative disadvantage, (2) import penetration, (3) concentration, and (4) export dependence.

The demand for protection rises as the domestic industry's *comparative disadvantage* intensifies. This is seen in the U.S. steel industry, which has vigorously pursued protection against low-cost Japanese and South Korean steel manufacturers in recent decades.

Higher levels of *import penetration*, suggesting increasing competitive pressures for domestic producers, also trigger increased demands for protection. A significant change in the nature of the support for protectionism occurred in the late 1960s when the AFL-CIO union abandoned its long-held belief in the desirability of open markets and supported protectionism. The shift in the union's position was due primarily to the rapid rise in import-penetration ratios that occurred during the 1960s in such industries as electrical consumer goods and footwear.

Another factor that may affect the demand for protection is *concentration* of domestic production. The U.S. auto industry, for example, is dominated by the Big Three. Support for import protection can be financed by these firms without fear that a large share of the benefits of protectionism will accrue to nonparticipating firms. Conversely, an industry that comprises many small producers (for example, meat packing) realizes that a substantial share of the gains from protectionism may accrue to producers who do not contribute their fair share to the costs of winning protectionist legislation. The demand for protection thus tends to be stronger the more concentrated the domestic industry.

Finally, the demand for protection may be influenced by the degree of *dependence on exports*. One would expect that companies whose foreign sales constitute a substantial portion of total sales (for example, Boeing Aircraft) would not be greatly concerned about import protection. Their main fear is that the imposition of domestic trade barriers might invite retaliation overseas, which would ruin their export markets.

SUMMARY

1. Even though the free-trade argument has strong theoretical justifications, trade restrictions are widespread throughout the world. Trade barriers consist of tariff restrictions and nontariff trade barriers.
2. There are three types of tariffs. An ad valorem tariff is stated as a fixed percentage of the value of an imported commodity. A specific tariff represents a fixed amount of money per unit of the imported commodity. A compound tariff combines a specific tariff with an ad valorem tariff.
3. Concerning ad valorem tariffs, several procedures exist for the valuation of imports. The free-on-board (FOB) measure indicates a commodity's price as it leaves the exporting nation. The cost-insurance-freight (CIF) measure shows the product's value as it arrives at the port of entry.
4. The effective tariff rate tends to differ from the nominal tariff rate when the domestic import-competing industry uses imported resources whose tariffs differ from those on the final commodity. Developing nations have traditionally argued that the tariff structures of many advanced nations on industrial commodities are escalated to yield an effective rate of protection several times the nominal rate.
5. U.S. trade laws mitigate the effects of import duties by allowing U.S. importers to postpone and prorate over time their duty obligations by means of bonded warehouses and foreign trade zones.
6. The welfare effects of a tariff can be measured by the following: protective effect, consumption effect, redistribution effect, revenue effect, and terms-of-trade effect.
7. If a nation is small compared with the rest of the world, its welfare necessarily falls by the total amount of the protective effect plus the consumption effect if it levies a tariff on imports. If the importing nation is large relative to the world, the imposition of an import tariff may improve its international terms of trade by an amount that more than offsets the welfare losses associated with the consumption effect and the protective effect.
8. Although tariffs may improve one nation's economic position, any gains generally come at the expense of other nations. Should tariff retaliations occur, the volume of international trade would decrease, and world welfare would suffer. Tariff liberalization is intended to promote freer markets so that the world can benefit from expanded trade volumes and international specialization of inputs.
9. Although not widely used as a trade restriction, tariff quotas have been used to protect certain industries. A tariff quota permits a limited number of goods to be imported at a lower tariff rate, whereas any imports beyond this limit face higher tariffs. Of the revenue generated by a tariff quota, some accrues to the domestic government as tariff revenue and the remainder is captured by producers as windfall profits.
10. Tariffs are sometimes justified on the grounds that they protect domestic employment, help create a level playing field for international trade, equalize the cost of imported products with the cost of domestic import-competing products, allow domestic industries to be insulated temporarily from foreign competition until they can grow and develop, or protect industries necessary for national security.

STUDY QUESTIONS

1. Describe a specific tariff, an ad valorem tariff, and a compound tariff. What are the advantages and disadvantages of each?
2. What are the methods that customs appraisers use to determine the values of commodity imports?
3. Under what conditions does a nominal tariff applied to an import product overstate or understate the actual or effective protection afforded by the nominal tariff?
4. Less developed nations sometimes argue that the industrialized nations' tariff structures dis-

courage the less developed nations from undergoing industrialization. Explain.

5. Distinguish between consumer surplus and producer surplus. How do these concepts relate to a country's economic welfare?
6. When a nation imposes a tariff on the importation of a commodity, economic inefficiencies develop that detract from the national welfare. Explain.
7. What factors influence the size of the revenue, protective, consumption, and redistribution effects of a tariff?
8. A nation that imposes tariffs on imported goods may find its welfare improving should the tariff result in a favorable shift in the terms of trade. Explain.
9. Which of the arguments for tariffs do you feel are most relevant in today's world?
10. Although tariffs may improve the welfare of a single nation, the world's welfare may decline. Under what conditions would this be true?
11. What impact does the imposition of a tariff normally have on a nation's terms of trade and volume of trade?
12. In 1978, President Carter extended relief to the U.S. CB radio industry when he increased import duties for a three-year period. What would be the likely effects of this policy for the U.S. economy if it were continued?
13. Would a tariff imposed on U.S. oil imports promote energy development and conservation for the United States?
14. A tariff quota is often viewed as a compromise between the interests of the domestic consumer and those of the domestic producer. Explain.
15. How does the revenue effect of a tariff quota differ from that of an import tariff?
16. What is meant by the terms *bonded warehouse* and *free-trade zone*? How does each of these help importers mitigate the effects of domestic import duties?
17. Assume that the nation of Australia is "small," unable to influence world price. Its demand and supply schedules for TVs are shown in Table 5.9. On graph paper, plot the demand and supply schedules on the same graph.
    a. Determine Australia's market equilibrium for TVs in the absence of trade.
        (1) What are the equilibrium price and quantity?
        (2) Calculate the value of Australian consumer surplus and producer surplus.
    b. Under free-trade conditions, suppose Australia imports TVs at a price of $100 each. Determine the free-trade equilibrium, and illustrate graphically.
        (1) How many TVs will be produced, consumed, and imported?
        (2) Calculate the dollar value of Australian consumer surplus and producer surplus.
    c. To protect its producers from foreign competition, suppose the Australian government levies a specific tariff of $100 on TV imports.
        (1) Determine and show graphically the effects of the tariff on the price of TVs in Australia, the quantity of TVs supplied by Australian producers, the quantity of TVs demanded by Australian consumers, and the volume of trade.
        (2) Calculate the reduction in Australian consumer surplus due to the tariff-induced increase in the price of TVs.
        (3) Calculate the value of the tariff's consumption, protective, redistribution, and revenue effects.
        (4) What is the amount of deadweight welfare loss imposed on the Australian economy by the tariff?
18. Assume that the United States, as a steel-importing nation, is large enough so that changes in the quantity of its imports influence the world price of steel. The U.S. supply and demand schedules for steel are illustrated in Table 5.10, along with the overall amount of steel supplied to U.S. consumers by domestic and foreign producers. On graph paper, plot the

TABLE 5. 9 / Demand and Supply: TVs (Australia)

Price of TVs	*Quantity Demanded*	*Supplied*
$500	00	50
400	10	40
300	20	30
200	30	20
100	40	10
0	50	0

TABLE 5. 10 / Supply and Demand: Tons of Steel: (United States)

Price/ Ton	*Quantity Supplied (Domestic)*	*Quantity Supplied (Domestic + Imports)*	*Quantity Demanded*
$100	0	0	15
200	0	4	14
300	1	8	13
400	2	12	12
500	3	16	11
600	4	20	10
700	5	24	9

supply and demand schedules on the same graph.

a. With free trade, the equilibrium price of steel is $____ per ton. At this price, ____ tons are purchased by U.S. buyers, ____ tons are supplied by U.S. producers, and ____ tons are imported.

b. To protect its producers from foreign competition, suppose the U.S. government levies a specific tariff of $250 per ton on steel imports.
   (1) Show graphically the effect of the tariff on the overall supply schedule of steel.
   (2) With the tariff, the domestic price of steel rises to $____ per ton. At this price, U.S. buyers purchase ____ tons, U.S. producers supply ____ tons, and ____ tons are imported.
   (3) Calculate the reduction in U.S. consumer surplus due to the tariff-induced price of steel, as well as the consumption, protective, redistribution, and domestic revenue effects. The deadweight welfare loss of the tariff equals $____.
   (4) By reducing the volume of imports with the tariff, the United States forces the price of imported steel down to $____. The U.S. terms of trade thus (improve/worsen), which leads to a(an) (increase/decrease) in U.S. welfare. Calculate the terms-of-trade effect.
   (5) What impact does the tariff have on the overall welfare of the United States?

47

SAMPLE CHAPTER EXCERPTS FROM

INSIDE THE GLOBAL ECONOMY:

Case Study Reader and Review Guide

Edited by Robert J. Carbaugh

CHAPTER 2

Protectionism Versus Free Trade

Learning Objectives

1) Countries protect their industries for a variety of reasons, most of which cannot be justified on economic grounds.
2) While protectionist policies help targeted industries, the economy as a whole usually loses.
3) In the post-war period, as average tariff levels have been negotiated down, the use of non-tariff barriers have gained in popularity.

Substantive Outline

Because international trade does hurt import-competing industries, almost every country imposes some kinds of restrictions on the international flow of goods and services. Protectionism of this kind is usually justified on the grounds that it: 1) saves jobs, 2) insulates domestic workers from unfair competition (at least temporarily), 3) nurtures infant or strategic industries and 4) maintains a level playing field for international trade. There may also be non-economic reasons, such as national defense and cultural preservation, used to justify protectionism.

Protectionist measures are generally viewed as inefficient ways of achieving the goals listed above because they introduce their own distortions in both the domestic and world economies. Typically restricting imports by raising tariffs or some other type of barrier to trade helps the import-competing industry by making imported goods either more expensive or less available. This hurts consumers by raising the prices of the goods they buy. It also introduces inefficiencies by encouraging the over-production of goods in which the protecting country has a comparative disadvantage. Finally it creates trade friction among countries and invites retaliation. The first Case Study follows the conflict between the U.S. and the European governments in the early 1990s over the protection of European agriculture, specifically the production of oil seeds. The U.S. complained that European polices hurt the more efficient U.S farmers. The Europeans responded that the protection was necessary to preserve an important sector of their economies. The dispute was partially resolved with the completion of the Uruguay round of the General Agreement on Tariffs and Trade (GATT) in late 1993, which called for a gradual phase out of the European protective policies.

During the post-war period, the various rounds of GATT negotiations have dramatically reduced the average tariff rate of the participating nations, thus helping to boost the growth in trade. However, in recent years non-tariff barriers (NTBs) have become more prevalent. NTBs include import quotas, antidumping regulations, subsidies, orderly marketing agreements, safety and environmental standards, discriminatory government procurement practices, local content requirements, voluntary export restraints (VERS) and export subsidies. The proliferation and complexity of NTBs have made this type of protection very difficult to monitor and police. Moreover, these types of protective measures can often have unintended consequences. The second Case Study assesses the impact of the VERs agreed to by the Japanese auto makers in the mid-1980s. The VERs did save some jobs in the U.S. auto industry but at a high cost to U.S. consumers who ended up paying higher prices for both imported Japanese cars and import-competing U.S. cars. The VER's also encouraged Japanese auto manufacturers to locate production facilities in the U.S. in order to circumvent this form of trade barrier.

Case Study

French agricultural subsidies and the conflict in the Uruguay Round

The demand by the U.S. that European governments reduce agricultural subsidies led to riots by French farmers and a near collapse of Uruguay Round of GATT negotiations.
With Xavier Beulin, Vice Chairman, Chambre de l'Agriculture, Orleans; Stuart Eizenstat, US Representative to the European Community; Steve Yoder, President, American Soybean Association; Frans Andriessen, former EC Commissioner.
Objective: To show that there are often intense political pressure to maintain protectionist policies, even when they cannot be justified on economic grounds.

Case Study

Voluntary restraints on Japanese cars exported to the U.S.

Voluntary restraints on Japanese cars exported to the U.S. arguably helped the U.S. auto industry but at a high cost of U.S. consumers.
With Steven Beckman, economist, United Auto Workers, William Brock, former U.S. Trade representative, Mark Silbergeld, Director, Washington office, Consumers Union, Robert Crandall, economist, The Brookings Institution; Rep. John Dingell, Chairman, U.S. House Energy and Commerce Committee.
Objective: To demonstrate that while a nation's protectionist policies may help the targeted industry in the short term, the nation's economy as a whole usually suffers.

Watch

Inside the Global Economy
Program 2:
PROTECTIONISM VERSUS FREE TRADE

After Viewing

See if you can answer the following questions:

1. What are the reasons that underlie government protection of industries?
2. Which of these reasons cannot be justified on economic grounds?
3. While protectionist policies help the targeted industries, the economy as a whole usually loses. Do you agree?
4. Why might workers in import-competing industries pressure the government for protectionism?

Read

The recommended readings for this television program are Chapter 5 (Tariffs) and Chapter 6 (Nontariff Barriers) in Carbaugh's *International Economics–5th Edition*. Also recommended are Chapter 5 (Tariffs) and Chapter 6 (Nontariff Barriers) in the *Study Guide for International Economics–5th Edition*.

Readings

The following articles complement the topics discussed in Program 2 of *Inside the Global Economy*. Read each article and complete the accompanying study questions.

FREE TRADE VS. PROTECTIONISM

by Adam Gonnelli

From Adam Gonnelli, *The Basics of Foreign Trade and Exchange* (1993) New York: Federal Reserve Bank of New York, pp. 14-17, 20-21.

Summary

In theory, free trade would provide the most goods and services at the lowest possible cost, as consumers are permitted to buy goods and services from whomever in the world produces them most efficiently. Because competition that free trade provides domestic industries may generate slow growth and unemployment, domestic firms and workers often desire protectionism. In the real world, political interest groups pressure the government for tariffs, quotas, and subsidies. In this selection, Adam Gonnelli describes the arguments for free trade and for protectionism.

All governments regulate foreign trade. The extent to which they do so is a topic of lively debate and is a source of great controversy. The news is full of reports of different groups demanding to be protected from foreign competition, new trade agreements, and problems with imports and exports. Some call for more government action, others for less.

Although the amount of government involvement in trade varies from country to country and from product to product, overall barriers to trade have been reduced since World War II.

Those who favor free trade think that an open trading system with few limitations and little government involvement is best. Advocates of protectionism believe that governments must take action to regulate trade and subsidize industries to protect the domestic economy. All governments practice protectionism to some extent. The debate is over how much or how little protectionism to use to reach a country's economic goals.

We've seen how trade can raise people's living standards, so why is there a debate at all about restricting it? If the goal of trade is to provide people with as many different goods as possible at the lowest prices, then shouldn't all barriers to trade be eliminated?

In theory, completely free trade would provide the most goods and services at the lowest possible cost, as consumers everywhere are allowed to buy goods and services from whomever in the world produces them most efficiently. However, the competition that free trade brings to domestic industries may result in unemployment and slower growth. For example, if cars can be produced much more efficiently in another country and consumers are free to buy them, the domestic auto industry will lose business. In this case, a government might seek to protect its auto industry from competition by discouraging imports of lower-cost cars.

ARGUMENTS FOR PROTECTIONISM

Sometimes, because of much lower labor costs, less-developed countries can produce goods less expensively than can developed nations. These goods tend to be more competitive on international markets, which is a source of great concern to producers of similar goods in industrialized nations. Therefore, the argument that protectionism is desirable because it protects domestic jobs by compensating for foreign firms' use of inexpensive labor is very powerful in developed nations.

Protectionists also argue that new or infant industries often must be protected to give them time to grow and become strong enough to compete internationally. Governments of developing countries may want their economies to become competitive in industries that can provide a firm foundation for future growth, such as computers and telecommunications. Rather than have new companies put out of business by well-established foreign firms, the government may shield its domestic companies from foreign competition until they develop sufficiently. Critics of this philosophy correctly point out that some of these infant industries never "grow up," meaning that they come to rely on protection and never become competitive.

In addition, traditional protectionist arguments hold that any industry crucial to national security,

such as the producers of military hardware, should be protected. This way, the nation will not have to depend on outside suppliers during political or military crises.

Protectionism also may promote diversification of the economy. If a country channels all of its resources into a few products, no matter how internationally competitive those products are, it runs the risk of becoming too dependent on them. However, if other, weaker, industries are kept competitive through protectionism, it may help the nation's economy to diversify.

ARGUMENTS FOR FREE TRADE

The debate about how free a trading system should be is an old one, with positions and arguments evolving over time. Free-trade advocate Frederic Bastiat presented the French Chamber of Deputies with a devastating satire of protectionists' arguments in 1845. His petition asked that a law be passed requiring people to shut all windows, doors, skylights and shades during the day, so that the candle industry would be protected from the "unfair" competition of the sun. He argued that this would be a great benefit to the French candle industry, creating many new jobs and enriching suppliers.

While it is undoubtedly true that the candle industry would benefit from a lack of sunlight, consumers would obviously not be happy about being forced to pay for light that they could get for free were there no government intervention.

U.S. free-trade advocates typically argue that consumers benefit from freer trade because foreign competition forces U.S. companies to keep prices low and provides a greater selection of goods and services. Foreign trade also forces U.S. companies to modernize plants, production techniques and technology, which keeps them competitive.

Free-traders argue that imposing protectionist measures, like tariffs, often brings about retaliation by foreign governments, which might seek to restrict sales of U.S. products in their countries. This may increase both inflation and unemployment, as U.S. export industries suffer and prices of imported goods rise. The Smoot-Hawley Tariffs of 1930, which placed high tariffs on both agricultural and manufactured imports, provoked a wave of retaliatory actions by overseas trading partners of the United States. World trade dropped by more than 60 percent, a reduction that deepened the Great Depression of the 1930s.

Another argument for free trade is that the costs of protectionism outweigh the benefits. For example, suppose the United States placed a tariff on imported wrenches that were less expensive than domestic wrenches. The tariff would have four basic costs to the economy:

- wrench-buyers would have to pay more for their protected U.S.-made wrenches than they would have for imported wrenches;
- jobs would be lost at retail and shipping companies that import foreign wrenches;
- jobs would be lost in any domestic industries that suffer from retaliatory tariffs; and
- the extra costs of the wrenches will be passed on to whatever goods and services the wrenches are used on. For example, if these particular wrenches are used to tighten bolts in a photocopy machine factory, the prices of those machines will have to include the extra cost of the wrenches.

These costs must be weighed against the number of jobs that the tariff would save.

Finally, an open trading system may create a better climate for investment and entrepreneurship than one in which the fear of governments cutting off access to markets is present.

Reading questions

1. Describe the infant-industry argument for protectionism.
2. Free-trade advocates maintain that consumers benefit from open markets and that the cost of protectionism outweighs the benefits. Explain.
3. The arguments for and against free trade, as presented in the above selection, emphasize economic issues. Are noneconomic arguments important to this controversy?

A Healthy Steel Industry Is Vital for National Defense

by Alton Slay

Excerpts from a talk by General Alton Slay (United States Air Force, Retired) at General Meeting of the American Iron and Steel Institute, New York, May 24, 1984. Reprinted from the June 15, 1984, issue of *Steel Comments*, published by American Iron and Steel Institute. Reprinted by permission.

Summary

This selection describes the national defense (security) argument for protectionism. It is maintained that the United States would likely become unduly reliant on foreign sources of many strategic minerals and products if the government was to pursue a free-trade policy.

What has happened over the past two decades and continues to happen to our industrial base in general, and to our steel industry in particular, is a situation that, in my opinion, can and very definitely will adversely affect the defense capability of our nation. It is a gross contradiction to think that we can maintain our position as a first-rate military power with a second-rate industrial base.

We are overwhelmingly dependent on foreign sources for our supply of many, many minerals that are absolutely critical to defense. And our main source of supply for most of these critical minerals is one of the most unstable areas of the world. Our mining industry is sick and getting sicker; our minerals-processing industry is sick and getting sicker. These industries are basic to our long-term security posture. And none is more basic than steel. Virtually every major hardware system built for our defense forces starts with steel as the primary ingredient. Applications of steel in defense range from a few pounds of very sophisticated alloys in spacecraft to tons of plate for the hull and other components of a warship or tank.

From the prosaic to the exotic—from fuel drums to black boxes for electronic gear to intercontinental missiles—steel is essential to military preparedness. Ordinary jet engines contain up to 10 different types of steel. Superthin steel wires guide the TOW antitank missile to its target. More than half a ton of steel is required to make our Air Force F-15 fighter aircraft. Steel is the ubiquitous material on any battlefield. Armies may travel on their stomachs, but they and their stomachs must travel on roads, bridges, trucks, buses, trains, ships, tanks, and aircraft all dependent for their construction upon steel in one form or another. How can we tolerate a situation in which we must depend on foreign suppliers for a large part of our steel and other basic material needs?

As another point: steel production facilities in Asia and Western Europe would be much more vulnerable to conventional arms attack than would facilities in the United States. Even if our friends were agreeable to supply our needs, could we count on those facilities surviving? And remember that *all* raw material and fuel for Japan's steel mills and Korea's steel mills has to be imported. That's another vulnerability.

Reading Questions

1. What is the national defense argument for protectionism?
2. Is the national defense argument an economic argument or a noneconomic argument for protectionism?
3. How can government officials determine which industries are vital for the nation's security?
4. Can the national defense argument for protectionism potentially lead to pork-barrel politics?

STEEL VOLUNTARY RESTRAINT AGREEMENTS AND STEEL-USING INDUSTRIES

by Robert Carbaugh and Darwin Wassink

From *Journal of World Trade*, August 1991, pp. 73-86. Reprinted by permission.

Summary

In 1984 steel imports surged into the United States, leading to industry cries of unfair competition. Pressured by the U.S. steel lobby, the Reagan Administration negotiated voluntary restraint arrangements (VRAs) to cover a five-year period with countries whose exports to the United States had significantly increased. In 1989 the Bush Administration extended the VRA program until 1992. This article considers the effects of the steel VRAs, especially their impact on steel-using industries.

Since 1969 the U.S. government has continually restricted foreign steel shipments into the United States. The United States has increasingly negotiated VRAs with foreign nations as part of its steel policy. VRAs typically involve the government of the exporting nation applying quotas on its manufacturers' sales abroad in danger that the importing nation would impose tariffs or quotas if it does not do so. By reducing the extent of foreign competition, VRAs permit less-efficient domestic producers to participate in markets that would have been lost to foreign producers that sell a superior product, or price on a more competitive basis.

Concerning steel, VRA quotas become *binding* when they reduce the volume of imports below the levels that would enter in the absence of such quotas; the quotas become filled before demand is satisfied. As domestic consumers compete against each other for the restricted supply, prices of foreign and domestic steel-makers increase. These higher prices benefit domestic producers but harm other industries that use steel as an input in production. Since the demands for both capital and labor used in the steel industry are derived from the demand for steel, increased demand for steel leads to increases in wages and returns on capital in the steel industry. In contrast, *nonbinding* quotas (i.e. those that are not filled) generally have no direct effect on the quantity imported or on prices; but their mere existence can provide domestic producers with the confidence to invest in plant and equipment.

VRAs also have implications for steel-using industries. When export quotas are binding, they raise import prices by limiting the supply of foreign steel in the home country. This encourages home-country manufacturers to substitute domestic steel products for VRA country-sourced steel. Home-country steel suppliers, in turn, respond to the increased demand by raising price and increasing output. This leads to rising production costs for steel-using industries (e.g. autos, machinery). To the degree that steel-using industries attempt to cover their production cost increases by raising product prices, they incur decreased sales as domestic consumers switch to relatively cheaper imports and as foreign consumers decrease their purchases of home-country exports. It is of little wonder why domestic steel-consuming industries often view VRAs as a "tax" which lessens their competitive position.

2. *The Reagan VRA Program of 1984–1989*

In January 1984, Bethleham Steel Inc. and the United Steelworkers of America filed a complaint with the U.S. International Trade Commission, alleging that surging steel imports were a substantial cause of serious injury to the industry. This led to the Reagan Administration initiating a nine-point comprehensiye program to address the concerns of the industry. Under this program, the President directed the United States Trade Representative to negotiate VRAs to cover a five-year period with countries whose exports to the United States had increased significantly in previous years. The VRAs were jointly administered by the United States and participating exporting countries. In return for granting the steel industry the VRA, the U.S. government stipulated that most of the industry's cash flow be reinvested in steel operations.

The Reagan VRA quotas were binding throughout 1985 and 1986, with the quota ceilings being filled completely by steel imports. Beginning in 1987, the VRA quotas begin to move toward a non binding status, largely due to an improvement in U.S. cost competitiveness, relatively strong demand in foreign markets, and the U.S. dollar's depreciation against the currencies of the European Community and Japan. On a global basis, 94 per cent of the total export ceiling established under the VRA program was filled in 1987. This figure dropped to 90 per cent in 1988 and 65 per cent in 1989; however, VRA ceilings on some products from some countries were filled. Throughout 1990 and early 1991, some 30 per cent of the VRA quotas remained unfilled, reflecting the weak steel market and low prices in the United States compared to foreign markets such as Japan and Europe. It thus appears that the VRA quotas were most influential during 1985–1987, and less so thereafter.

Following the implementation of the VRAs in 1984, there was a pronounced increase in the share of U.S. imports accounted for by countries that were not bound by those agreements. These nonrestrained countries were able to increase steel shipments to the United States from approximately 4 million tons in 1984 to 6.5 million tons in 1988, while U.S. imports from VRA countries fell from 20 million tons to 15.4 million tons during this period; by 1990 VRA country steel shipments to the United States had decreased to 13.5 million tons while non-VRA country shipments decreased to 4.4 million tons. Among the major non-VRA country suppliers to the United States have been Canada, Sweden, Taiwan, Argentina, Turkey, and Singapore.

Concerning steel imports from non-VRA countries, another issue is the effect of steel exported from VRA countries to non-VRA countries for fabrication and re-exportation to the U.S. market. The transformation of VRA steel in non-VRA countries and subsequent export to the United States has been widespread, encompassing a variety of products and countries. Examples of the transformation of VRA steel in non-VRA countries include galvanized coils from New Zealand, wire products from Canada, fabricated structural steel from Taiwan, and pipe from Thailand. In some cases, manufacturers from VRA countries have been involved in third-country transformation ventures and supply them with raw material; examples include partial ownership of Steel Tubes Company of Singapore by Japan's Kobe Steel Company.

When VRA quotas are binding, the typical result is a greater proportion of exports of higher valued products within each steel category subject to the export restraint. The resulting increase in import prices encourages U.S. consumers to substitute domestic and non-VRA supplied steel products for VRA country-sourced steel products. U.S. suppliers, in turn, respond to increased demand with higher prices and increased shipments. During the early years of the VRAs, quota scarcities contributed to higher prices of U.S. imported steel as well as domestic steel. With steel imports from countries covered by the VRAs falling so significantly short of the VRA ceilings in 1988 and 1989, the price effect of the overall VRA quotas, if any, was insignificant; admittedly, however, the VRAs may have contributed to scarcities and price increases in particular steel products. Other factors, such as the dollar's depreciation and the increase in foreign steel demand, seemed to be of greater importance in explaining the overall price increases that occurred in the U.S. market during this period. As the dollar depreciated, foreign producers became less active in the U.S. market, with sales becoming less profitable. Under these conditions, price increases would generally take place.

When VRA quotas are binding, they lead to higher prices for domestic and imported steel and higher production costs for downstream steel users. Unless the U.S. production has no influence on world prices, the higher production costs are likely to be passed forward to the final consumers of products manufactured with steel. Binding quotas would also be expected to generate product scarcities. During the first phase of the VRA program, the effects of the quotas on U.S. steel consumers—purchasers, warehousers, processors, and distributors of foreign and domestic steel mill products—were mixed. The view most often voiced by American steel customers was that the VRAs led to market shortages and thus higher prices in certain markets for the steel they consume. Tight supplies also resulted in longer delivery times and shortages of certain raw materials such as special quality bars and plates. In response to the tight steel market, numerous short-supply requests were filled by U.S. steel consumers with the U.S. government. Steel consumers maintained that these factors resulted in some of them losing both domestic and export sales due to their inability to supply their customers with the desired quantity and quality of steel in the specified period of time.

Caterpillar, Inc., a manufacturer of earthmoving, construction, and materials-handling machinery, was especially vocal in its criticism of the VRA program and lobbied against its extension. Specifically, Caterpillar contended that quota-induced steel shortages led to higher Caterpillar costs by forcing the firm to: (1) temporarily resource products to countries where steel was available; (2) at times manufacture incomplete products; (3) purchase steel from warehouses at a 50 per cent premium; (4) adopt more expensive inventory management systems.[1] Other organizations of steel consumers expressing similar feelings included the Forging Industry Association, the Precision Metal Forming Association, the National Association of Food Equipment Manufacturers, the Industrial Fasteners Institute, and the Farm and Industrial Equipment Institute. In general, these groups have maintained that the steel quotas unduly favor U.S. steel manufacturers and lead to increased steel prices, product quality problems, and longer lead times for steel deliveries.

Although the majority of steel users expressed negative feelings concerning the VRAs, some steel purchasers maintained that they benefitted from the VRA quotas. These purchasers generally argued that the VRAs provided order and discipline to the steel market by permitting controlled quantities of steel to enter the United States without the possibility of market disruption caused by the filing of unfair trade cases. The reliability of input supply appears to be a key issue for some steel users, especially smaller buyers. Among the proponents of the VRAs were a diverse group of steel-using businesses including manufacturers of wire products, pipe and tube products, and steel tanks; the group also included various steel fabricators, processors, warehousers, and distributors. Many steel manufacturers and users maintained that the VRAs, even with nonbinding quotas, helped stabilize the domestic market. They restricted potential price reductions by imposing an upper limit on imports that could be attained with a lower import price. To the degree that downward price movements were restricted, holders of domestic steel inventories and owners of capital specific to the U.S. steel industry, realized a smaller downside risk of unexpected losses.

The Bush VRA Program

In July 1989, the Bush Administration announced its program for extending the steel VRAs. Known as the "Steel Trade Liberalization Program," the Bush approach is intended to provide a transition to a free, competitive steel market over a period of two-and-one-half years; the program is scheduled to terminate on 31 March 1992. As its focal point the program has the attainment of an international consensus to eliminate trade-distorting practices of major steel-producing foreign nations, including export subsidies and domestic subsidies. Its time frame of two-and-one-half years is considered to be sufficient to attain such an international understanding. The agreements are also designed to enable the domestic industry to complete its efforts to restructure and modernize.

The Bush VRA program is a continuation for most of the Reagan VRAs. However, it reflects changes that took place in the U.S. steel market during the Reagan program. In the early 80s, the U.S. steel industry was plagued with large financial losses, excess capacity, and relatively limited modernization. Since 1984, when the Reagan VRA program was initiated, the industry has brought its supply capability into line with demand, initiated efforts to modernize its remaining capacity, and returned to profitability in the late 80s. It can therefore be argued that by 1989 the U.S. industry was in a better position to contend with a potentially increased volume of imports. The Bush program thus provides more emphasis to the needs of the consumer, including those steel-using industries that encounter shortages of semi-finished steel. These changing market conditions appear to underlie the more liberal market share target of the Bush program.

Liberalizing the market share target would potentially provide beneficial effects for U.S. steel-using industries and consumers. Allowing imports to capture a higher share of the U.S. market under the Bush program could result in a decrease in steel prices and production costs of steel-using manufacturers. It is estimated that in a market characterized by binding quotas and domestic steel supply constraints (i.e. domestic firms operating close to full capacity, as occurred during 1987–1989), steel prices could fall by about 1.5 per cent under the Bush VRA program. These price

reductions would lead to a 0.2 per cent decrease in the costs of production for U.S. steel-using industries and an increase in their sales of $1.6 billion to nearly $5 billion.[4] If significant excess capacity existed in the U.S. steel industry, steel users would expect even greater benefits under the more liberal VRAs of President Bush.

In practice, however, the VRA quotas have not been binding under the Bush Administration. As previously noted, throughout 1990 and early 1991 some 30 per cent of the VRA quotas remained unfilled. Nonbinding quotas imply that the economic forecasts contained in the previous paragraph would not apply. However, the quotas are a strategic stabilizing measure in that they provide a protectionist hedge against the possibility of an unexpected appreciation in the dollar's exchange value and the resulting surge of steel imports into the United States.

The Reagan steel VRA program of 1984–1989 was intended to limit the importation of unfairly traded steel, and to enable the domestic steel industry to restructure and modernize, thus becoming more competitive in the world market. The main focus of the Bush VRA program of 1989–1992 is different. Its main goal is to eliminate alleged trade-distorting practices in steel trade through bilateral and multinational negotiations.

The VRA quotas that result from these programs have helped shield the U.S. steel industry from foreign competition. However, they have imposed costs on domestic steel-using industries. For the wire-drawing industry, the cost of steel amounts to over 60 per cent of total production costs. A rise in steel prices, the usual result of steel quotas, can impose significant hardships on steel-using industries. Given the U.S. steel industry's return to profitability in the late 80s, the Bush Administration was hard pressed to justify extending the VRA ceilings; nevertheless, an extension was made for two-and-one-half years. Whether the Bush Administration will live up to its commitment to wean the domestic industry from import protection by 1992 appears to depend on the health of the economy, the degree that foreign nations agree to terminate trade-distorting activities, and the binding/nonbinding status of the VRAs.

Reading Questions

1. Why did the United States negotiate steel export restraint agreements with foreign nations? Did these restraints successfully limit steel imports during the Reagan administration? How about during the Bush Administration?
2. How can steel import quotas affect the competitiveness of domestic steel-using industries? Why did Caterpillar Inc. protest the implementation of the quotas?
3. If steel import quotas reduce the competitiveness of domestic steel-using industries, should they be implemented?
4. If you were a member of the United Auto Workers union, would you support the attempts of the United Steel Workers union to obtain trade protection from the government?

FALCULTY MANUAL

by James S. Hanson

for

INSIDE THE GLOBAL ECONOMY TELECOURSE

and Carbaugh's

INTERNATIONAL ECONOMICS

5th Edition

Program 2

PROTECTIONISM

Key Points

1. Countries protect their industries to improve their terms of trade, to counter market imperfections, to foster infant industries, to redistribute income, and to raise revenue, as well as for non-economic objectives.

2. The tools of protectionism include import tariffs and a variety of nontariff measures such as import quotas, voluntary export agreements, and production subsidies.

3. The imposition of a tariff will help domestic producers, hurt domestic consumers, and raise government revenues.

4. If a country is large enough, then the gain from a tariff will offset at least part of the efficiency loss that results from the distortion of incentives facing domestic producers and consumers.

Lesson Overview

The case for free trade is ever more compelling, given the benefits derived from the post-war boom in international trade. Nevertheless, there have been plenty of losers and national governments continue to protect domestic industries from foreign competition. In recent decades the nature of this protection has become more subtle and more complex.

The pressure for protection typically comes from producers in import-competing industries who have formed effective political pressure groups. National governments accede to this kind of pressure for a variety of reasons, including: (1) improving the terms of trade; (2) countering market imperfections and distortions; (3) nurturing infant industries; (4) redistributing income; (5) raising revenues; and (6) non-economic reasons such as national security.

Protectionist measures are generally viewed as an inefficient way of achieving these goals because they introduce their own distortions in the world economy. For example, an import tariff drives a wedge between domestic and foreign prices. As a result, it helps producers in the import-competing industries by making imported goods less competitive, and hurts consumers by raising prices of the goods they purchase. Thus, the country imposing the tariff over-produces the import-competing good and under-consumes the imported good.

Other benefits from protection can offset this inefficiency. Governments can raise revenues by levying tariffs. Also, if a country is large enough, it can effect a reduction in import prices as its trading partners try to counteract the impact of the tariff. This reduction in import prices will improve the terms of trade. If trading-partner countries retaliate, the terms of trade improvement could be minimal or even worsen. Furthermore, even if the net effect of a tariff on a given country's welfare is positive, the impact on the world economy is unambiguously negative because tariffs reduce trade.

The assessment of other forms of protectionism, such as quotas, voluntary export restraints, export subsidies is equally negative because in most instances the goals of protectionism can be reached more effectively and more clearly through other policies.

Television Program 2, Protectionism

Learning Objectives

1. Countries protect their industries for a variety of reasons, most of which cannot be justified on economic grounds
2. While protectionist policies help targeted industries, the economy as a whole usually loses
3. In the post-World War II period, as average tariff rates have been negotiated down, the use of nontariff barriers have gained in popularity

Content Outline

Because international trade does hurt import-competing industries, almost every country imposes some kinds of restrictions on the international flow of goods and services. Protectionism of this kind is usually justified on the grounds that it: (1) saves jobs, (2) insulates domestic workers from unfair competition, (3) nurtures infant or strategic industries and (4) maintains a level playing field for international trade. There may also be noneconomic reasons, such as national defense and cultural preservation, used to justify protectionism.

Protectionist measures are generally viewed as inefficient ways of achieving the goals listed above because they introduce their own distortions in both the domestic and world economies. Typically, restricting imports helps the import-competing industry by making imported goods either more expensive or less available. This hurts consumers by raising the prices of the goods they buy.

It also introduces inefficiencies by encouraging the over production of goods in which the protecting country has a comparative advantage. Finally it creates trade friction among other countries and invites retaliation.

The first cast study follows the conflict between the U.S. and European governments in the early 1990s over the protection of European agriculture, especially the production of oil seeds. The U.S. complained that European policies hurt the more efficient U.S. farmers. The Europeans responded that the protection was necessary to preserve an important sector of their economies. The dispute was partially resolved with the completion of the Uruguay Round of the General Agreement on Tariffs and trade in 1993, which called for a gradual phase out of the European protective policies.

The second case study assesses the impact of the voluntary export restraints (VERs) agreed to by the Japanese auto makers in the early 1980s. By restricting the supply of Japanese autos in the U.S. market, the VERs did save some jobs for U.S. autoworkers, but at a high cost to U.S. consumers who ended up paying higher prices for both imported Japanese cars and import-competing U.S. cars. The VERs also encouraged Japanese auto firms to locate production facilities in the U.S. in order to circumvent this form of trade barrier.

Video Case Studies

1. *French agricultural subsidies and the conflict in the Uruguay Round*

Case Study: The demand by the U.S. that European governments reduce agricultural subsidies led to riots by French farmers and a near collapse of the Uruguay Round of GATT negotiations. With Xavier Beulin, Vice Chairman, Chambre de l'Agriculture, Orleans, Stuart Eizenstat, US Representative to the European Community, Steve Yoder, President, American Soybean Association, Frans Andriessen, former EC Commissioner.

Objective: To show that there are often intense political pressures to maintain protectionist policies, even when they cannot be justified on economic grounds.

BEST COPY AVAILABLE

2. *Voluntary export restraints on Japanese cars imported to the U.S.*

Case Study: Voluntary restraints on Japanese cars exported to the U.S. arguably helped the U.S. auto companies but at a high cost to U.S. consumers. With Steven Beckman, economist, United Auto Workers, William Brock, former U.S. Trade representative, Mark Silbergeld, Director, Washington office, Consumers Union, Robert Crandall, economist, The Brookings Institution,
Rep. John Dingell, Chairman, U.S. House Energy and Commerce Committee.

Objective: To demonstrate that while a nation's protectionist policies may help the targeted industry in the short term, the nation's economy as a whole usually suffers.

Recommended Text Readings/Exercises

Read Chapter 5, "Tariffs," and Chapter 6, "Nontariff Barriers," in *International Economics*, by Robert Carbaugh, 5th edition, (Southwestern Publishing Company, 1994).

Read Program 2, "Protectionism," in *Inside the Global Economy: A Case Study Reader and Study Guide* by Robert Carbaugh, (Southwestern Publishing Company, 1994).

In James Hanson's *Study Guide for International Economics--5th Edition* (Southwestern Publishing Company, 1994), complete the following exercises: Chapter 5, "Tariffs;" Chapter 6, "Nontariff Barriers."

In William Gunther's *Inside the Global Economy: An Interactive Tutor*, complete the following exercises: Foundation Concept 4, "Tariffs;" Foundation Concept 5, "Quotas and Nontariff Barriers."

Multiple-Choice Questions

1. Because international trade hurts _____, almost every country imposes some kind of restrictions on the international flow of goods and services:
   a. Import-competing industries
   b. Export industries
   c. Domestic consumers
   d. Domestic savers

2. Restrictions on imports do not:
   a. Save jobs for workers in the import-competing industry
   b. Insulate domestic workers from unfair foreign competition
   c. Nature infant or strategic domestic industries
   d. Increase the welfare of the domestic consumer

3. A non-economic justification for trade restrictions is that they:
   a. Promote a level playing field for world producers
   b. Nature strategic industries in the home country
   c. Preserve the nation's defense and culture
   d. Lead to greater levels of specialization by world producers

4. Protectionist import barriers tend to:
   a. Make goods less expensive and more available for domestic consumers
   b. Make goods more expensive and less available for domestic consumers
   c. Increase sales for domestic exporting companies
   d. Decrease sales for domestic importing companies

5. A tariff applied to steel imports tends to:
   a. Decrease the production costs of domestic auto manufacturers
   b. Increase the production costs of domestic auto manufacturers
   c. Result in domestic steel workers having fewer jobs
   d. Result in domestic auto workers having more jobs

6. Import restrictions tend to:
   a. Encourage the overproduction of goods in which the protecting country has a comparative advantage
   b. Encourage the overproduction of goods in which the protecting country has a comparative disadvantage
   c. Help domestic consumers by lowering the prices of goods that they buy
   d. Help domestic exporters by reducing their costs of production

7. During the 1980s and early 1990s, there was a conflict between U.S. and European farmers that resulted in:
   a. The United States insisting that Europe reduce its farm subsidies
   b. The United States insisting that Europe increase its tariffs on agricultural imports
   c. Europe insisting that the United States increase its farm subsidies
   d. Europe insisting that the United States increase its tariffs on agricultural imports

8. The U.S.-European agricultural dispute of the 1980s and early 1990s resulted in an agreement that called for:
   a. A modest increase in U.S. trade protection over several years
   b. An instantaneous elimination of U.S. trade protection
   c. A gradual phase out of European protective policies
   d. A modest increase of European protective policies

9. In the post-war period, the various rounds of GATT negotiation have:
   a. Increased the average tariff rate for participating nations
   b. Reduced the average tariff rate for participating nations
   c. Not changed the average tariff rate for participating nations
   d. Any of the above

10. In the past two decades:
   a. Tariffs have increased in importance while nontariff barriers have decreased in importance
   b. Tariffs have decreased in importance while nontariff barriers have increased importance
   c. Both tariffs and nontariff barriers have increased in importance
   d. Both tariffs and nontariff barriers have decreased in importance

11. Nontariff barriers include all of the following <u>except</u>:
   a. Orderly marketing agreements
   b. Government subsidies
   c. Customs duties
   d. Import quotas

12. In the mid-1980s, the Japanese government:
    a. Increased import tariffs on auto imports from the United States
    b. Decreased import tariffs on auto imports from the United States
    c. Removed limits on Japanese auto exports to the United States
    d. Placed limits on Japanese auto exports to the United States

13. Because of the Japanese automobile export quotas of the 1980s:
    a. U.S. consumers paid lower prices for imported autos
    b. U.S. consumers paid higher prices for imported autos
    c. U.S. auto firms captured a smaller share of the U.S. market
    d. U.S. auto firms realized smaller revenues and profits

14. The U.S.-Japan voluntary export agreement of the 1980s:
    a. Discouraged Japanese auto firms from locating assembly plants in the United States
    b. Encouraged Japanese auto firms to locate assembly plants in the United States
    c. Discouraged U.S. auto firms from locating assembly plants in Japan
    d. Encouraged U.S. auto firms to locate assembly plants in Japan

15. The U.S.-Japan voluntary export agreement of the 1980s resulted in welfare losses for:
    a. U.S. auto workers
    b. U.S. auto companies
    c. U.S. auto consumers
    d. Japanese auto consumers

16. During the 1980s, Caterpillar Inc. complained that quotas on steel imports resulted in:
    a. An oversupply of steel on the domestic market
    b. Excess profits for domestic steel companies
    c. Higher production costs for steel-using firms
    d. Job losses for domestic steel workers

17. Which of the following is <u>not</u> cited as a justification for trade restrictions:
    a. Permitting infant industries to mature and become competitive
    b. Increasing jobs for domestic workers
    c. Maintaining self sufficiency for the nation's military
    d. Fostering specialization and the division of labor

18. According to the _____ argument, governments should impose trade barriers that protect domestic firms producing goods involving advanced technologies:
    a. Military self-sufficiency
    b. Cheap foreign labor
    c. Strategic trade policy
    d. Level playing field

19. Protectionist pressures in the United States have been caused by all of the following <u>except</u>:
    a. U.S. trade deficits
    b. Unemployment of U.S. workers
    c. Rising national income in developing nations
    d. Falling profits of U.S. manufacturers

20. The imposition of a tariff on oil is <u>least</u> likely to result in a (an):
    a. Increase in production costs of oil-using industries
    b. Decrease in the quantity of oil imports
    c. Increase in the price of oil
    d. Increase in productivity of the domestic oil industry

Answers to Multiple-Choice Questions

1.	a	2.	d	3.	c	4.	b
5.	b	6.	b	7.	a	8.	c
9.	b	10.	b	11.	c	12.	d
13.	b	14.	b	15.	c	16.	c
17.	d	18.	c	19.	c	20.	d

True-False Questions

1. While protectionist trade policies help targeted industries, the economy as a whole usually loses.

2. In the post-war period, the use of nontariff barriers has decreased while the use of tariffs has increased.

3. Because international trade hurts exporting industries, most countries impose some kind of restrictions on the international flow of goods and services.

4. The national defense argument is an economic justification for trade restrictions.

5. Trade restrictions tend to hurt domestic consumers by raising the prices, and reducing the availability, of the goods they buy.

6. Trade restrictions introduce inefficiencies by encouraging over-production of goods in which a country has a comparative disadvantage.

7. In the early 1990s, Europe complained that the United States provided large subsidies to its oil-seed farmers which hurt the more efficient European farmers.

8. With the completion of the Uruguay round of the General Agreement on Tariffs and Trade in 1993, Europe agreed to a gradual phasing down of its protective agricultural policies.

9. In the post-war period, the various rounds of GATT negotiations have dramatically reduced the average tariff rate of participating nations, thus helping to boost the growth in trade.

10. Nontariff trade barriers include import quotas, antidumping regulations, subsidies, orderly marketing agreements, and customs duties.

11. Nontariff trade barriers are more easy to monitor and police than tariff barriers.

12. In the early 1980s, the United States convinced Japan to temporarily hold down its auto shipments to the United States in order to give U.S. manufacturers time to modernize their operations.

13. The Japanese auto export restraints of the 1980s did save some jobs in the U.S. auto industry, but at the expense of U.S. consumers who paid higher prices for autos.

14. Because of the Japanese-U.S. voluntary export restraint program in autos during the 1980s, U.S. auto firms were encouraged to locate assembly plants in Japan.

15. Japanese auto exporters can avoid the restrictive impact of U.S. tariffs and quotas by locating manufacturing plants in the United States.

16. An import quota provides a minimum threshold on the amount of a good that is allowed into the country.

17. Trade restrictions increase jobs for workers in an import-competing industry, but reduces their ability to bargain for higher wages.

18. It is universally recognized that trade restrictions can be justified on economic grounds.

19. All sectors of the domestic economy benefit from protectionist trade policies.

20. Import restrictions tend to improve the welfare of producers in the import-competing industry, but worsen the welfare of domestic consumers.

Answers to True-False Questions

1.	T	2.	T	3.	F	4.	F
5.	T	6.	T	7.	F	8.	T
9.	T	10.	F	11.	F	12.	T
13.	T	14.	F	15.	T	16.	F
17.	F	18.	F	19.	F	20.	T

ARRANGEMENTS FOR USE

INSIDE THE GLOBAL ECONOMY programs and case studies can be used in a variety of ways:

- As a complete college-credit course in international economics
- As supplementary material for classes in international economics, international trade and finance, and comparative economic systems, among others
- As an educational tool for businesses, government, consultants, and any organization dealing with international trade and policy, or economic development
- As an offering for adult or continuing education students
- As an important addition to library video collections

Colleges, universities, and other education institutions can:

- License the use of INSIDE THE GLOBAL ECONOMY as a complete telecourse through the PBS Adult Learning Service. For information, phone 1-800/257-2578; in Virginia, 703/739-8495; or return the top card attached.
- Purchase the programs on videocassettes to use in the classroom or media center. Phone 1-800/LEARNER.

  1/2" VHS $389 for the entire 13-part series on 13 cassettes

  $200 for the 26 case studies on 4 cassettes
  $39.95 per one-hour program

  Package $539 for the entire 13-part series and 26 case studies on 17 VHS cassettes

  Videodisc for 26 case studies on 2 videodiscs . (phone 1-800-LEARNER for price. Available January 1995)

- Tape the programs off-air to use in the classroom or media center. Phone 1-800-LEARNER.
  $200.00 for the entire series
- Duplicate programs for use in the classroom or media center. Phone 1-800-LEARNER.
  $200.00 each copy of a single-series copy, up to 4 copies

To order videocassettes or request a preview cassette, return the second card attached or phone 1-800-LEARNER.

For more information about the INSIDE THE GLOBAL ECONOMY telecourse, mail this card or phone 1-800-257-2578, or FAX your request to 703-739-8495.

I am interested in using INSIDE THE GLOBAL ECONOMY as a telecourse. Please send me:

❑ a VHS preview cassette ❑ a telecourse license ❑ an off-air taping license

Name _____
Title _____
Department _____
Institution _____
Address _____
City/State/ Zip _____
Telephone _____

To request a VHS preview cassette, phone 1-800-LEARNER.

To purchase INSIDE THE GLOBAL ECONOMY videocassettes or videodiscs, an off-air taping license, or a duplication license, phone 1-800-LEARNER or return this card with a purchase order, check or credit card information to:

Annenberg/CPB Collection, P.O. Box 2345, South Burlington, VT 05407-2345.

I am interested in purchasing:
❑ Video Series (1/2" VHS videocassettes) $389 per series plus shipping
❑ Case studies with guide (two videodiscs): price TBA, available Jan 1995,
❑ Off-air taping license ($200 per series)
❑ Duplication license ($200 per series)

Name _____
Title _____
Department _____
Institution _____
Address _____
City/State/ Zip _____
Telephone _____

To request a complimentary examination copy textbook, **INTERNATIONAL ECONOMICS: Fifth Edition by Robert Carbaugh**, fill out and mail this card (or fax your request to 1-800-451-3661).

Name _____
Institution _____
Address _____
City/State/ Zip _____
Telephone _____
Course Title _____
Annual Enrollment _____
Adoption Decision Date _____
Text Currently in use _____
Probability of Adoption ❑ Strong ❑ Moderate ❑ Unlikely

PLACE
STAMP
HERE

INSIDE THE GLOBAL ECONOMY
PBS Adult Learning Service
1320 Braddock Place
Alexandria, VA 22314-1698

PLACE
STAMP
HERE

INSIDE THE GLOBAL ECONOMY
The Annenberg/CPB Collection
P.O. Box 2345
South Burlington, VT 05407-2345

PLACE
STAMP
HERE

SOUTH-WESTERN College Publishing
5101 Madison Rd
Cincinnati, OH 45227-1490

Leading authorities on business, economics and international finance discuss the forces shaping the global economy

INSIDE THE GLOBAL ECONOMY

A 13-part PBS television series for college credit or informal learning and video training material for corporations, government and service agencies

BEST COPY AVAILABLE

from
The Annenberg/CPB Collection

SERIES

Inside the Global Economy includes 13 one-hour television programs that present an in-depth examination of the basic principles of international economics. They are the result of a multinational collaboration of a coproduction team from the U.S., Australia, Sweden, The Netherlands, and Latin America. By balancing generally accepted American views with those from other parts of the world, the programs broaden viewers' perspectives on the growing economic interdependence of nations—how it happens and how it affects lives around the globe.

Each program features two documentary case studies that illustrate the connection between economic theory and global trade, business, and finance in concrete, highly visual terms. The 26 case studies were produced in more than 20 countries. Some provide a new perspective on major world events of the past 40 years; others cover recent international economic milestones, including the formation of the European Economic Community, the efforts at economic transformation of the former Soviet Union and other East European countries, and the repositioning of the United States as an economic power.

Using a variety of production techniques—on-location production as well as use of news and archival footage—the stories offer fresh insights from leaders, policy makers, economists, consumers, workers and their families. They take viewers to France to interview a director of Airbus Industrie, to Zaire for the views of an impoverished coffee farmer, to a U.S. debate over the voluntary restraint of automobile exports from Japan.

In addition to the case studies, each program provides an introduction and analysis of the economic principles by the project's director of content, Dr. Nariman Behravesh, senior vice-president/research director at DRI/McGraw-Hill. A distinguished group of international economists from Australia, Sweden, Venezuela, and the U.S. wraps up each program with an illuminating round-table discussion of a major economic issue.

Whether viewed for general information, coursework, or training purposes, *Inside the Global Economy* provides unique and fresh perspectives on the forces that are shaping the 1990s and beyond.

BEST COPY AVAILABLE

THE PROGRAMS

Inside the Global Economy consists of 13 one-hour programs including *two documentary case studies per* program. The case study segments are also available separately on videocassettes or videodiscs and via PBS. (See "Arrangements for Use" for more information.)

[illegible]
focuses on trade to illustrate the forces transforming the global economy, addressing questions such as: Why do nations trade? What determines the basis and direction of trade? Who gains or loses from trade?

Case studies
- IBM's shift of computer production from the U.S. to Japan
- Impact of Australia's mineral export boom on its domestic car production

[illegible]
examines impediments to trade, covering both tariff and nontariff barriers. It includes discussions about the driving forces behind protectionism and the likely winners and losers.

Case studies
- French agricultural subsidies and conflict in the Uruguay Round
- Voluntary export restraints on Japanese cars into the U.S.

[illegible]
discusses ways countries try to change their competitive advanta in trade through subsidies and in dustrial and regulatory policies. Import-competing and export-promotion policies are compared using specific examples.

Case studies
- The development of Airbus as an example of industrial policy
- The Chilean wine industry and export promotion policy

[illegible]
compares the progress made on multilateral trade liberalization in the post-World War II period with parallel attempts to form preferen tial trading arrangements. Include discussions of the static and dynamic impact of free trade areas, customs unions, etc.

Case studies
- The Canadian-U.S. Free Trade Agreement
- The entry of the United Kingdom into the EC and its impact on trac with Australia

[illegible]
considers the international mobil of capital, labor, and technology, including the relationship betwee trade in goods (and services), the mobility of factors of production, and the pressures that drive and inhibit labor migration.

Case studies
- Guest workers and immigrants in The Netherlands
- Mexican immigration to the U.S. and the Maquiladora program

[illegible]
examines these organizations as a vehicle for movement of capital a transfer of technology as an engin of globalization, with discussion o

the controversies often accompanying the activities of multinationals.

Case studies

Direct investment by Ericsson in Hungary

Whose multinational is it? A comparison of Smith-Corona and Brother

[illegible] RATES

considers the strengths and weaknesses of the two types of exchange rates using the experience of the 1960s, '70s, and '80s. Includes discussion of the role of exchange rates as shock absorbers as well as the costs of exchange rate fluctuations.

Case studies

- The impact of U.S. dollar fluctuations in the 1980s—Komatsu vs. Caterpillar
- Floating exchange rates and petrodollar recycling in the 1970s

[illegible]

extends the discussion by examining what motivates governments to manage currencies and coordinate policies. The limits to government intervention in foreign exchange markets are highlighted by looking at recent events in the U.S. and Europe.

Case studies

- The Plaza and Louvre Accords
- The cost to the U.K. of joining the European Monetary System

9: EXCHANGE RATES, CAPITAL FLIGHT AND HYPERINFLATION

analyzes factors that affect exchange rates. These include the impact of international capital flows and other market factors, such as inflation and trade flows.

Case studies

- Mexico and the money center banks—capital flight and return
- Hyperinflation in Argentina

10: DEVELOPING COUNTRIES

analyzes how these nations have been helped (or hurt) by the rapid growth in trade and factor mobility in the post-World War II period. It discusses steps that can be taken to integrate developing countries into the global economy.

Case studies

- Comparison of development policies in South Korea and Sri Lanka
- Tanzania: the policies of aid vs. trade

11: ECONOMIES IN TRANSITION

focuses on the transformation of former Communist countries into market economies and assesses the macro- and micro-economic policies needed to ensure their successful reintegration into the global economy.

Case studies

- Russia—the fate of state industries vs. private entrepreneurs
- Poland—the transition to a market economy: did shock therapy work?

12: ENVIRONMENT

looks at the international dimension of environmental problems, focusing on transnational pollution, international property rights, and perceived differences between trade and environmental protection.

Case studies

- The U.S.-Mexico agreement on dolphin-safe tuna fishing
- Transnational implications of pollution along the Rhine River

13: THE EVOLVING WORLD ECONOMY

explores the dynamic aspects of comparative advantage, the evolutionary nature of trade competitiveness, and the importance of human capital. It also looks at the shift in comparative advantage away from manufacturing to services and knowledge-intensive industries in industrialized countries.

Case studies

- U.S. dominance of the global software market
- The rise of East Asia (especially China) as an economic power

THE TELECOURSE

The complete package includes the 13-hour broadcast television series for distance-learning undergraduate courses, a case study reader and review, a recommended textbook, print and software tutorials for students, and a faculty guide. (These components are described in more detail below.)

THE VIDEOCASSETTES

Full programs: The 13 one-hour programs are also available on VHS videocassettes as resources for use by colleges and high schools, or for business and corporate management training sessions.

Case studies: The complete set of 26 video case studies (averaging six to nine minutes in length) are also available separately for course use, independent study, or individualized training program use. They are contained on two two-hour VHS cassettes or two two-sided videodisks.

THE TEXTBOOK

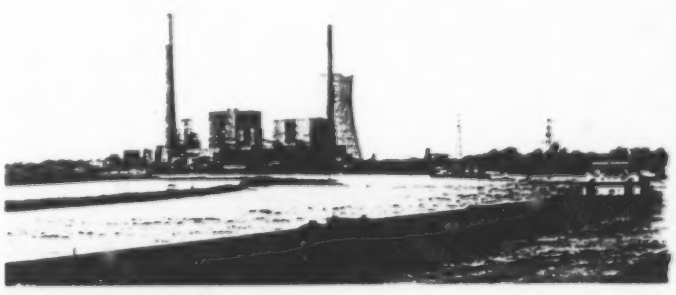
International Economics, Fifth Edition

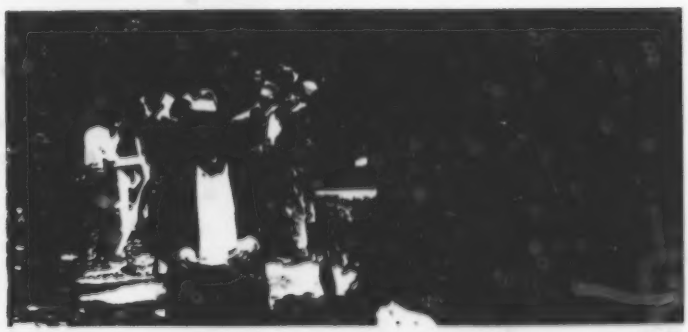
Robert J. Carbaugh

Professor of Economics,

Central Washington University

Like the programs themselves, Carbaugh's text takes an applied approach to study of international





BEST COPY AVAILABLE

ternational Economics

nomics. Clear writing and a
lth of real-world examples pro-
e student understanding of the
vance of economic principles to
temporary issues. The text
plements the telecourse with full
ussion of topics such as indus-
and strategic trade policy, com-
tive advantage theory, exchange
determination and forecasting,
rnational trade in services, envi-
nental regulatory policies and
rnational competitiveness.

th-Western College Publishing
k #: HV60EA
N: 0-538-84427-2
price: $54

de the Global Economy:
ase Study Reader and Review
de
ed by Robert J. Carbaugh

guide functions as the tele-
rse study guide. It contains a
cial collection of articles, mono-
phs, and other resource readings
d to the case studies that are
gned to amplify material pre-
ted in the series and the text-
k. With review exercises.

th-Western College Publishing
k #: HV60ED1
N: 0-538-84444-2
price: $28

THE STUDY GUIDE

Study Guide for Carbaugh's *International Economics, Fifth Edition*
James S. Hanson,
Willamette University

With problems and projects keyed to the text.

South-Western College Publishing
Stock #: HV-60ED
ISBN: 0-538-84443-4
List price: $19

THE SOFTWARE

Inside the Global Economy: An Interactive Tutor
William T. Gunther,
University of Alabama, and Irene R. Gunther, Systematic Research, Inc.

This IBM-based computer software program for students includes a glossary of terms from the videos and the textbook; foundation topics, with graphical analysis where appropriate, featuring "KwickCheck" interactive testing; simulations (allowing for forecasting scenarios for potential outcomes on variables such as exchange rates or oil prices) that encourage students to utilize their analytical skills; and a database of multiple-choice questions, keyed to textbook chapters, that can be used to create self-tests. Available in DOS and Windows formats for the IBM PC and compatibles.

Producer: Economics Software Design, Tuscaloosa, AL
South-Western College Publishing
ISBN: 0-538-84558-9
List price: $16

THE FACULTY TELECOURSE MANUAL

Faculty Manual for *Inside the Global Economy* and Carbaugh's *International Economics, Fifth Edition*
Edited by Robert J. Carbaugh

With information on the course, suggestions on managing a telecourse, and a test bank that includes brief answers/solutions to end-of-chapter questions in the text plus a wealth of multiple-choice questions keyed to the programs (with answers) to aid preparation of quizzes and examinations.

South-Western College Publishing
Stock #: HV60EX
ISBN: 0-538-84445-0
Complimentary to instructors licensing the telecourse.

HOW YOU CAN USE *INSIDE THE GLOBAL ECONOMY*

- As a college credit telecourse fulfilling a one-semester elective in international economics, given by economics, business, or political science departments
- As support materials for on-site, economics-related undergraduate or graduate level courses in international economics, international trade and finance, comparative economic systems, etc.
- As an educational tool for business and management consultants, multinational corporations, marketing and telecommunication specialists, securities and financial analysts, law and accounting firms, economic planners, or governmental, community, and service agencies dealing with international trade and policy or economic development
- As a social science offering for adult or continuing education students or for gifted and advanced placement high school students
- As a video reference resource for public and university libraries and media centers

ARRANGEMENTS FOR USE

For educational use, all these options are possible:

License
License the use of *Inside the Global Economy* as a complete telecourse through the PBS Adult Learning Service or acquire an off-air or off-satellite taping license for the series or the 26 video case studies. For further information, phone 1-800-257-2578 or fill in and return the top card attached.

Purchase
Purchase the complete video series and/or case studies on videodiscs to use in your classroom or media center.
Phone 1-800-LEARNER for further information or fill in and return the second card attached.

- Series only (13 one-hour programs on VHS cassettes): $389
- Single programs: $39.95 each
- Case studies (26 video case studies on two videodiscs): Price to be announced.

Prices do not include shipping and handling.

Tape
Tape the programs off-air or duplicate them for use in your classroom or media center. Phone 1-800-LEARNER for additional information.

- Off-air taping of the series: $200
- Duplication of a single series copy: $200 (each copy, up to four copies)

To request a preview cassette, at no charge, phone 1-800-LEARNER or return the second card.

INSIDE THE GLOBAL ECONOMY

Maquiladoras. GATT. Multinationals. Most favored nations. NAFTA. Terms formerly limited to high-level policy sessions and specialized journals are now a part of the American vocabulary. But many Americans need a better, more conceptually based understanding of the economic forces driving the changes that prompt questions like these:

- Is it possible to have trade that is both free and fair?
- Is the age of global corporations a welcome or frightening phenomenon?
- Can countries stabilize exchange rates?
- How will regional trading blocs affect world trade?
- How can industrial nations best assist developing countries?
- Can the former Communist countries enact market reforms?
- Is conflict between free trade and environmental protection inevitable?

To answer questions like these, the team that created the highly acclaimed *Economics U$A* series has produced *Inside the Global Economy*, a unique international project that examines and explains the basic principles of international economics. *Inside the Global Economy* consists of a 13-part telecourse, a text, a case study reader and review guide, a study guide, a software tutorial, and a faculty manual.

The result is a look inside the global economy that is both visually exciting and intellectually stimulating.

BEST COPY AVAILABLE

ECONOMICS CONTENT TEAM

Nariman Behravesh
Director of Academic Content
Senior Vice President and
Research Director
DRI/McGraw-Hill

Thomas O. Bayard
Deputy Director & Research Fellow
Institute for International Economics,
Washington, D.C.

Magnus Blömstrom
Professor of Economics
Stockholm School of Economics,
Sweden

Jolanda Heemskerk
Lecturer in International Economics
University of Amsterdam, The Netherlands

Lawrence Klein
Benjamin Franklin Professor
of Economics & Finance
University of Pennsylvania

Rachel McCullough
Professor of International Finance
Brandeis University

Richard H. Snape
Professor of Economics and Chair,
Department of Economics
Monash University, Australia

Gerver Torres
Alternate Executive Director,
International Monetary Fund
Former Minister of State and President,
Venezuelan Investment Fund

Frederick van der Ploeg
Professor of Political Economy
University of Amsterdam, The Netherlands

PRODUCTION TEAM FOR INSIDE THE GLOBAL ECONOMY

Stephen L. Rabin
Project Director
Educational Film Center

Ira Klugerman
Executive Producer
Educational Film Center

Louis Barbash
Producer/Director
Educational Film Center

Peter Baroutis
Executive Producer
ABC-TV Open Learning, Australia

Lupko Ellen
Executive Producer
The Teleac Foundation, The Netherlands

Francisco Ginesta
Producer/Director
JL Producciónes, Chile

Roger Samsioe
Producer/Director
Swedish Educational Broadcasting
Company

Julie Al Saadawi
Economics Research Associate
DRI/McGraw-Hill

FUNDING

Major funding for *Inside the Global Economy* is provided by the Annenberg/CPB Project. Additional funding and production is provided by ABC-TV Open Learning, Australia; The Teleac Foundation, The Netherlands; Swedish Educational Broadcasting Company; and JL Producciónes, Chile.

The Annenberg/CPB Project was created in 1981 with the goal of increasing opportunities for Americans to acquire a high-quality college education using telecommunications and information technologies. The Project leads a national movement to make innovative technology-based educational materials widely available for educational institutions, libraries and individuals.

Major Funding from
The Annenberg/CPB Project

Inside the Global Economy
The Annenberg/CPB Collection
P.O. Box 2345
South Burlington, VT 05407-2345

BULK RATE
U.S. POSTAGE
PAID
SO. SAN FRANCISCO, CA
PERMIT #655

Globe art on cover by Michael Northrup

PLACE
STAMP
HERE

INSIDE THE GLOBAL ECONOMY
PBS Adult Learning Service
1320 Braddock Place
Alexandria, VA 22314-1698

PLACE
STAMP
HERE

INSIDE THE GLOBAL ECONOMY
The Annenberg/CPB Collection
P.O. Box 2345
South Burlington, VT 05407-2345

PLACE
STAMP
HERE

SOUTH-WESTERN College Publishing
5101 Madison Rd
Cincinnati, OH 45227-1490

BEST COPY AVAILABLE

For more information about *Inside the Global Economy* telecourse, mail this card or phone 1-800-257-2578, or FAX your request to 703/739-8495.

I am interested in using *Inside the Global Economy* as a telecourse. Please send a preview guide containing a sample text chapter, Reader chapter, additional information about course content and utilization and off-air taping.

NAME

TITLE

DEPARTMENT

INSTITUTION

ADDRESS

CITY/STATE/ZIP

TELEPHONE

To request a VHS preview cassette, phone 1-800-LEARNER.

To purchase *Inside the Global Economy* videocassettes, an off-air taping license, or a duplication license, phone 1-800-LEARNER or return this card with a purchase order, check, or credit card information to: Annenberg/CPB Collection, P.O. Box 2345, South Burlington, VT 05407-2345.

I am interested in purchasing:

- ☐ Video Series (1/2" VHS videocassettes): $389 per series plus shipping
- ☐ Case studies (two videodiscs): Availability and price to be announced
- ☐ Off-air taping license: $200 per series
- ☐ Duplication license: $200 per series

NAME

TITLE

DEPARTMENT

INSTITUTION

ADDRESS

CITY/STATE/ZIP

TELEPHONE

To request a complimentary examination copy of the textbook, **International Economics, Fifth Edition, by Robert J. Carbaugh,** fill out and mail this card (or FAX your request to 1-800-451-3661).

NAME

INSTITUTION

ADDRESS

CITY/STATE/ZIP

TELEPHONE

COURSE TITLE

ADOPTION DECISION DATE ANNUAL ENROLLMENT

TEXT CURRENTLY IN USE

PROBABILITY OF ADOPTION 76 ☐ STRONG ☐ MODERATE ☐ UNLIKELY